THE USE OF SECONDARY DATA IN THE STUDY OF LIVING ARRANGEMENTS OF HOUSEHOLDS: A Case Of The October Household Survey-'96 (OHS): Western Cape Province.

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Assignment presented in partial fulfilment of the requirements for the degree of M.Phil. in Social Science Methods at the University of Stellenbosch.

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DECLARATION

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it at any qther university for a degree.

Signature:

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Date:

ABSTRACT

This study was aimed at using secondary data to conduct an investigation into the relationship between macro-economic factors on one hand and aspects of household life on the other hand. On the basis of the results thereof, an assessment was to be made of how such a relationship reflected on the living arrangements of households in contemporary South African society. The basis of the analysis was secondary data from the October Household Survey (OHS-96) data set, which is rich in specific information encompassing various aspects of human life, like demographic details and household variables as well as health, education and employment variables.

As expected, the results showed that the current state of living arrangements of households is characterised by positive relationships between income levels on the one hand and households variables like type of dwelling and dwelling ownership on the other hand. However, the same findings further revealed a surprising outcome that unlike expected, there is no clear relationship between income and another significant household variable i.e. household size (members). However, our findings lead us to a conclusion that on the whole, there is a hypothesised relationship between macro-economic conditions of a country on one hand, and patterns in living arrangements of households on the other hand.

The results further revealed that as expected, the factors of magisterial district and race/population groups have an effect on this relationship that reflect our legacy of social and economic development policies of the apartheid era which gave rise to urban (metropolitan) and racial bias in the socio-economic development of households. The results thereof are that African households in particular, and urban poor black households in general, have become the least prosperous in terms of material or economic living conditions. The implications of these findings for theory and policy are highlighted.

At the level of methodology, the valuable experience of this study served to further highlight the worth of secondary data analysis, not only in general economic terms, but also as invaluable educational or teaching tool for students which recommends its increased use by all practitioners or institutions of social research methods.

Sinopsis

Die Internet en sy Kuberruimtes is ontwikkel in die 1960s as 'n manier om inligting oor te dra sonder die risiko van intersepsie en vernietiging. Vandag, 40 jaar later het die Internet gegroei in beide grootte en toepassing. Die mees algemene gebruike is nogsteeds kommunikasie en die oordrag van informasie. Hierdie tesis is 'n etnografiese studie van my ervaringe in 'n Kuberruimte van die Internet- 'n virtuele gemeenskap byname Amazon City.com. Virtuele gemeenskappe is areas op die Internet waar mense bymekaar kom om hul daaglikse lewens, kwessies en enige iets toepaslik vir die spesifieke gemeenskap, te bespreek. Die tipe gemeenskap word gesien as 'n reaksie van die verval van "derde plekke" in af-lyn lewe en globalisering

Die gemeenskap wat vorm in hierdie areas ontwikkel kulturele veronderstelling. Hierdie veronderstellings word openbaar aan 'n nuwe lid deur tyd en interaksie in die konferensie area. Die veronderstellings wat ek ervaar het strek van kennis benodig om 'n aanvaarde en suksesvolle lid van die gemeenskap te word, tot taal gebruik en identiteit van die lede. Die konklusie is bereik dat lede hul interaksie en lidmaatskap in hierdie gemenskappe as net so bevredigend en "eg" ervaar as hul aktiwiteite in hul af-lyn lewe .

Verdere aspekte wat 'n webblad 'n suksesvolle en ekonomiese vatbare besigheids strategie maak vir sy eienaar, was my volgende fokus. Internet besigheid groei teen 'n geweldige spoed, en impliseer nie slegs die verkoop van produkte aanlyn nie. Rekenaar-ondersteunde kommunikasie toestelle is geimplimenteer op kommersiële webbladsye nadat dit gevind is in die vroeë 1990s dat mense soek vir 'n plek wat meer is as net nog 'n winkel. Ander maniere wat hierde dot com webbladsye gebruik om inkomste te genereer en of die lede gesien word as burgers of as verbruikers word ook bestudeer. Daar is gevind dat die lede hulself sien as burgers maar webbladsy lojaliteit sal die lede aanspoor om as verbruikers op te tree indien nodig. Die kommersiële aspekte van die tipe webbladsy is 'n noodsaaklik deel vir die voortbestaan van die dot com webbladsy, en die gemeenskap wat daar ontwikkel.

We must learn from books, from our own experiences, and from the experiences of others. But we must always learn!

- Amilca Cabral -

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1. CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Rationale

The significant macro-economic developments that emerged during the 1990s, like globalisation, have had a negative impact on the socio-economic relations within and between (rich and poor) societies in the new millennium. According to researchers Macfarlane and Daniels (2000:35), this process has contributed directly towards many crises, including the legacy of poverty and social disintegration, particularly in city districts around the world. It triggered a phenomenon where cities are degenerating into Metropolitan sprawls. As a result, the high concentration of urban population that characterises these emerging sprawls poses a threat to human (and environmental) survival in the affected areas.

The emergence of these urban sprawls could be explained within the broader context of globalisation, which has led to increasing unemployment and declining household incomes. According to Tomlinson (2000:47), globalisation has thus far only had positive outcomes in developed countries (mainly western) where the majority of the labour force is able to participate in the production of goods and services for export. But in poorer and developing countries this process has been associated with an overall negative effect on people's lives - for example, in South Africa where a million jobs were lost due to economic restructuring initiatives by both public and private sectors between 1993 and 1997 alone.

It is very likely that such developments have serious implications for the material living conditions of the populations concerned. Within the local socio-economic context, the economic or material impact of globalisation has exacerbated existing class and race disparities in terms of wealth distribution. This view is based on the findings of various studies that were directed at assessing the diverse general welfare standards of all South Africans. These studies include one conducted by Bhorat (2000:39) that revealed empirical evidence to the effect that, in South Africa, White workers earn, in general, an average of 70 per cent more than their African and Coloured counterparts. This situation naturally provoked public interest in the welfare circumstances of those affected.

The picture painted above is consistent with Keenan's (1988:41) research findings that the socio-economic situation of most households, and particularly those in urban and African areas, has been declining since the mid-1980s. According to Keenan, this finding served to challenge the apartheid's reform-era rhetoric by the then P.W. Botha regime that "the general economic conditions of blacks (Africans), as reflected in or measured by their material standard of living, has been improving" (1988:41). This finding also implies that race is still a significant factor in the analysis of living arrangements of the households in South Africa today.

This finding consequently poses a challenge for students or researchers - to explore the impact that this phenomenon has had on the lives of ordinary people. In other words, these developments pose an academic or scientific challenge to researchers or students to update the existing literature and theory of household arrangements so that they reflect current realities. One way of achieving this objective is by exploring the patterns in the living arrangements of households within the target population (which in this case is the Western Cape).

As a researcher, I hope that the data in this study will help to reveal patterns in living conditions of the households concerned, with regard to aspects like membership size, house ownership and employment status, to mention but a few. The field of policy research could be one of the immediate beneficiaries of this study, as my findings will hopefully inform policy development efforts in various government departments, such as welfare, housing, health and labour.

Like all other aspects of human life, the current patterns in living arrangements of households reflect the material living conditions and life circumstances of people. These patterns can be understood against the background of the threat that various factors, such as unemployment, poor health and a high crime rate, pose for the new democracy in South Africa. These factors are both of an internal and external nature: the latter include globalisation and its effect of on developing economies, such as that of South Africa, while the former are mostly historical factors: apartheid legacies of poverty, urban-biased development policies and a racially-biased social welfare system. The collective effect of these factors on the lives of all citizens has manifested itself in various ways, all of which have had a negative impact on people's lives.

As the household is considered to be the basic social and economic unit of society, any changes in the material (economic) conditions of people's lives (as a result of globalisation measures, for example) are likely to trigger changes in the characteristics of households, like size, composition and the material well being of its members. For example, tough global competition for local products and local labour leads to the closure of businesses and job losses, which in turn lead to difficult life circumstances for the affected households. Implications like these are highlighted by Ekouevi *et al.* (1991), who contend that the distribution of goods, housing and health infrastructure triggers further changes in the composition and structure of households.

Arguably, the living arrangements of households are among the most significant aspects of everyday life. Based on their US observations, Sweet and Bumpass maintain the view that "living arrangements have a profound effect on the economic and social wellbeing of individuals and the relative prevalence of different types of living arrangements that can be associated with differences in material resources and lifestyles"(1987:1). It therefore makes sense that, from time to time, we should assess the impact of structural socio-economic changes on the lives of ordinary people. This could be done by a thorough analysis of the socio-economic dynamics of households in general, and the corresponding living arrangements in particular.

The need to assess the impact of these changes in global political economy is also inspired by Gonzalez's (1969) arguments. On the basis of his study of households in the Caribbean, he advances a view that there is a close relationship between household types and economic factors. It therefore becomes important that such claims are investigated: undertaking such a study will thus serve as an acknowledgement of the possible existence of ties between the socio-economic state of households and the macro-economic situation. Hopefully, such efforts shall help to update literature and inform appropriate policy formulation on households and living arrangements. I shall reflect further on these arguments in the next chapter.

This study also has a specific methodological focus: it is now practically possible to have access to massive information that is provided by large-scale national or international datasets, for example the October Household Survey. Since this wealth of (secondary) data in the form of datasets is freely available, I decided that it would

be worthwhile to use it to explore how various households organise themselves in response to the challenges posed by the rising unemployment rate and poor housing provisions, and other similar international trends. Public interest could benefit by using such findings to make informed policies or solutions on issues relevant to living arrangements like job creation, housing policy and strategies and welfare provision.

Further methodological benefits of the use of secondary data in this study are also derived from claims made by some scholars in the area of secondary analysis: - amongst these are Ekouevi *et al.* (1991). They maintain that in general, information on the characteristics of households in developing countries is rare[1] and where available, difficult to use for policy purposes. Some scholars (Procter, 1995:56) attribute this to the fact that almost all data in social research are seriously under-analysed, and Procter calls for the increased use of secondary data for conducting various types of studies. Secondary analysis can be a valuable practice with much benefit for the public as it reveals valuable information, as De Vaus illustrates. De Vaus (1996:25) refers us to a specific study in which descriptive (secondary) data found in (stored) datasets played a key role in highlighting existing social problems in Britain. The study in question revealed housing patterns that suggested the existence of a systematic racial bias against non-white minorities in the allocation of housing. Where a primary study of the patterns of the allocation of housing may have been obstructed by problems like high research costs and difficulties in gaining access or permission to conduct such a study by the relevant authorities (for fear of discriminatory practices and policies being exposed), a secondary analysis could be performed quite easily.

A further methodological benefit of secondary analysis is the clear understanding that a secondary analyst can have of the contents of secondary data. A secondary analyst can understand the data as clearly as the original researcher who initiated and designed the primary study. This implies that it is now possible to have a uniform understanding of the same data among different researchers, and this means enhanced communication between researchers. Researchers can take advantage of this,

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[1] This fact is confirmed by the history of OHS undertaken for the first time in 1995 "to fill the gap that resulted from the suspension of Current Population Survey (CPS) amongst Blacks in 1990 and amongst Coloureds and Indians in 1991". Correspondence from South African Data Archive (SADA).

particularly at times when funding for research is scarce. Hakim (1982) contends that secondary analysis thus offers savings of time, money and personnel.

In academic terms, the advantage of this kind of study lies in the fact that the practice of secondary analysis is a useful learning tool. As Dale et al. (1988:3) observe, a readily accessible and well-documented dataset enables students to carry out their own analysis in areas of substantive importance and provides a medium for acquiring valuable data analysis skills in the areas of secondary data analysis, statistics and computing in general.

In summary, one can thus reiterate Hakim (1982)'s contention that the very nature of secondary analysis means that survey data can be re-utilised, as such data provides a good basis for exploring other topics in addition to that of the original study. Secondary data offers certain advantages over primary research in terms of reduced financial costs and time spent on data collection. In the light of these factors I chose to make use of secondary data for this study.

Thus far, I have discussed the state of socio-economic profiles of households in South Africa, and how these profiles reflect the legacy of the policies of apartheid. I then discussed the role of globalisation as a factor effecting current changes in world economic markets and its effect on the living conditions of people. The predominant view that emerged is that these changes impact negatively on the lives of people, mainly the poor majorities across the globe. It is in this light that I will define the purpose of my study in the next section.

1.2 Aims and Objectives

Against the background of the developments highlighted in the previous section, the overall objective of this study was defined as follows:

> To assess the possibility of a relationship between macro-economic factors and material living conditions of people within households.

Stated differently, the study proposed to assess how patterns of material conditions of households - in terms of accommodation, assets and membership size/composition -

are influenced by the economic well being (income) of the heads of these households or breadwinners. As indicated above, I will review the literature with regard to both the living arrangements of households and the methodology of secondary data analysis.

This study must be seen against the background of Keenan's (1988:35) research findings that an increase in income/earnings did not always lead to better material or economic living conditions and western lifestyles among urban black households (and amongst Africans in particular). The intention was for this study to produce findings that could account for this unusual situation. However, at an empirical level, the aims of this study were defined as:

- Firstly, to identify and describe the current patterns in socio-economic circumstances of people's lives within households in the Western Cape, in general but also in particular districts (geo-economical) and racial/population group classifications.
- And secondly, to explore the methodological potential and limitations of secondary (survey) data as a design for the study in question and its implications for similar future projects.

1.3 Theoretical Framework and Hypotheses

In recent years there has been a worldwide shift in the state of living arrangements of households. This shift may be better understood against the background of the history and legacy of the Industrial Revolution, which ushered in an era of various socio-economic changes. These included, *inter alia,* a process of radical shift from manual and mostly rural labour activity to mechanical and technological factory and professional work in newly emerging urban areas. Naturally, as these changes unfolded, the traditional household structure was also gradually transformed to reflect new social values and lifestyles.

The impact of this transformation also triggered further changes in the socio-economic life of households. One of these changes was that the traditional large, extended households, which were then common and well suited to a mainly rural, pre-industrial lifestyle gradually disappeared. This type of household arrangement became increasingly difficult to sustain, both financially and in terms of time needed for child rearing, as women then joined the labour force alongside men, which meant less time could be spent at home than before. In other words, these changes also brought about an end to the predominantly manual labour production system and thus discouraged pre-industrial practices and values. These changes included a shift from the formation of large size households towards smaller sized (nuclear) type of household arrangements.

As this change in household size was a fairly global development, much has been written by various authors about the state of global living arrangements of households to date. One of these authors is Gonzalez (1969) who, on the basis of his study of living arrangements of households in the Caribbean, contended that there was a possible relationship between family form and the state of the economy. The view that such a relationship exists was also explored in the various case studies that were conducted by Spiegel *et al.* (1996), Chang (1997) and Verdon (1998), whose findings I discuss below.

Central to the above-mentioned scholars' arguments is the common view that changes in the presumed relationship between the economic and households' dynamics were affected by certain changes and developments. These included the rise of complex household structures in the US, the dual-household structures amongst some South African households, and the flexible living arrangements in Korea. These studies together paint a common picture that the ideal of smaller size households, consisting only of nuclear families, became popular in the richer developed countries, while the converse is true of the poorer developing countries. The economic and developmental problems made it practically difficult for these populations to live in smaller households. The modernist models of organising households could not be replicated under the poorer economic conditions that characterise the developing world.

The supposed relationship between the macro-economic and household spheres of life should thus be understood within the context of the current phenomena of globalisation which entails the restructuring of the world economy along neo-liberal lines. However, this process has thus far generally had a negative impact on the economies of developing countries and on the lives of the poor people in particular. According to Harvey this is even acknowledged by the World Bank, which has accepted that "privatisation - a factor which is central to neo-liberal restructuring of the economy (i.e. globalisation) - has increased poverty and unemployment to their highest-ever levels, particularly in Africa" (2000:43). Implicit in this acknowledgement is the notion that a clear relationship exists between the economic situation and the living conditions of the people in a country, and therefore the patterns in local living conditions are likely to reflect the state of the macro-economic conditions in any given country.

Within the local context, research has also revealed how changes in the economy have in turn led to further changes in the living arrangements of households, thus tacitly acknowledging the existence of some relationship between these two spheres of life. (i.e. the economic and the social spheres). For instance, according to Jeanette Bennett (2000) recent studies conducted locally show that the economic developments in the 1990s have, in general, narrowed the gap between the rich and poor. In particular this report reveals that the ratio of income between the poorest 20 per cent and the richest 10 per cent of our local population has narrowed from 1:45 in 1991 to 1:22 in 1999. In simple terms this means that for every R1 that a poor household earns, a rich household now earns R.22, as compared with R45 in 1991. However, the same research report also shows that, despite the general improvements in the income gap, "disparities between the races have, on average, remained consistent, with income of around R7.50 for whites to every R1 for blacks" (Bennett, 2000). One of the disturbing exceptions to this trend, however, is that the income gap has in fact widened among households within the black population. In monetary terms this gap has grown from the richest black households earning R25 for every R1 earned by the poorest in 1991, to R32 for every R1 in 1999. Bennett says this implies that "the most well-off black households have been the major benefactors of redistribution" (Bennett, 2000). It thus remains to be seen how these economic developments have

impacted on South African's lives in general. Hopefully, an examination of the state of their living arrangements will shed some light in this.

Keenan (1988:45) contextualises the above picture more clearly. He explains that one of the reasons why the rise in household income among urban blacks has not had the expected positive material impact is because the rise in relative income in this population group was paralleled by a concurrent rise in unemployment. The effect of this was that the ratio of dependants on the employed people rose significantly. Under such circumstances therefore, higher incomes would not always ensure a better standard of living, and perhaps this is even more evident in the relationship between incomes and household size, as Kelley (1980) shows.

According to Kelley (1980:1081), the household size and composition are aspects of household life where a rise in income does not always translate into expected or desirable effects. This has particularly been the case in poorer developing countries where, apparently, poverty and the poor health levels that derive from this has encouraged the formation of large family households. The primary reasons are to guard against the risk of a high infant mortality rate and the need for extra income that can be provided by one's own working children or by tenants or sub-tenants.

In short, the arguments advanced thus far imply that the macro-economic changes or patterns relate to the material or economic wellbeing of households directly through the income of the heads of households, for example. In turn, patterns in income distribution are expected to reflect patterns in the economic or material wellbeing of people within households. This logic is also derived from Sanjek's claim (1982:99 cited by Benson 1990:10) that households are shaped by their political and economic context, which further influence their household structure and adaptation (in case of migrants from rural to urban).

In this study this would mean that the general narrowing of the income gap between the rich and the poor is indicative of positive improvements in the general distribution of our national economic wealth. This argument also implies that it is possible that a positive relationship exists between income, as basic indicator of the economic

wellbeing of households and other household variables like Type of Dwelling, Dwelling Ownership and Household Size.

From the above discussions, and from some deductions from the literature, I therefore hypothesised that there is a relationship between economic factors like income, and various household variables, (viz. type of dwelling, dwelling ownership and household size). This implies that one would logically expect to find that households that have higher incomes will be better-off in terms living arrangements i.e. they are more like to have better dwellings, smaller households and better health and education conditions etc. as compared with those in lower income levels. The following specific hypotheses were formulated:

1. **Hypothesis 1. (Income by type of household)**
   Households in high-income brackets are more likely to live in formal dwellings than households in lower-income brackets. Similarly, households in lower-income brackets are more likely to live in informal dwellings than those in high-income brackets.

2. **Hypothesis 2. (Income by dwelling ownership)**
   Households in high-income bracket are more likely to own the dwellings that they live in than their counterparts in the lower-income bracket. Conversely, households in the lower-income bracket are less likely to own their dwellings than those in a high-income bracket.

It was, however, anticipated that the patterns in the relationships between income and the type of dwelling and dwelling ownership would also have an influence on the size and composition of the household. The logic of this was derived from the reasoning that the better the quality of accommodation (type of dwelling) and the economic status of the household (as measured by ownership or non-ownership of the dwelling) the more this could provide a sense of social security. This in turn could further encourage more stable family lifestyles, characterised by small-size nuclear family households. As Kelley (1980:1084) suggests, if the cost of rearing children rises with income, then those households with higher incomes would be associated with household sizes that are much smaller and socially desirable.

It should however be acknowledged that the above views are derived from the mainly western socio-economic experiences of living arrangements of households, which may not necessarily translate successfully under non-western conditions. However, the following hypothesis could still be formulated:

3. Hypothesis 3. (Income by household size)

Households in a high-income bracket are more likely to have smaller sizes (fewer or between 1 and 3 members) than those in low-income brackets. Similarly, households in lower-income brackets are more likely to have large household sizes (between 4 and 6 members or more) than their counterparts in higher-income brackets.

My hypotheses are based on the assumption that their predicted relationships would have a universal application. However, in the context of South Africa, these hypotheses should take into account the context of our unique societal history. This implies that the level of the magisterial district and the race or population group involved may influence these hypothesised relationships, and that consequently controls should be used for these variables. The former control variable draws a distinction between metropolitan and non-metropolitan households, while the latter differentiates households according to different race or population groups, i.e. Blacks (Africans), Coloureds and Whites.

The logic of the above contention is derived mainly from the legacy of apartheid and is reflected in various studies, including the one cited by Bennett (2000), which reveals a picture of stark disparities between the different race groups, despite new trends of general improvements in the income gap. This disparity implies that within the South African context, the relationship that income, as an economic variable, may have with each of these variables (household size, dwelling ownership, type of dwelling etc.) is likely to be influenced in some way by factors of district and race group respectively. There are numerous studies that have explored this theory, among them the one conducted by Bhorat (2000).

Bhorat's (2000) study revealed empirical evidence to the effect that white workers in South Africa today earn an average of 70 per cent more than their African and

Coloured counterparts. This situation can be better understood against the background of the legacy of previous urban public development policies that drew a discriminatory distinction between race/population groups and were biased in favour of whites.

With regard to the level of magisterial district, the effect stems from the fact that the previous development policies were biased in favour of big cities at the expense of smaller towns and rural areas in particular. For the majority of citizens who lived in these areas, most of whom were black people, their circumstances of social and economic neglect were tough and thus offered little prospect for a better future. In other words, a situation of economic underdevelopment affected the material livelihood of small town and rural households and therefore their potential breadwinners were often forced by poverty to move towards cities in search of better jobs. However, these 'migrations' to the metropolis were often temporary as 'migrants' often continued to maintain contact with their households in the small towns and rural areas, i.e. these breadwinners belong practically to two households.

Thus, it follows from above that the hypothesised relationships are most likely to be influenced by the effect of some control variables, viz. level of magisterial district and (race) population group of a household in this manner:

- Metropolitan households, and mainly those within the white population group, will be more likely to have a strong correlation with a high-bracket incomes, formal types of dwellings, dwelling ownership and small size households, while conversely,
- Non-metropolitan households, and mainly those within the African (Black) population group, will be more likely to have strong associations with low-bracket incomes, informal dwellings, and non-ownership of dwelling and large size households.

In the light of these facts, it follows that the hypotheses 1, 2 and 3 can only be stated on the assumption that the hypothesised relationships will reflect the effects of these

control variables (i.e. magisterial district and race groups). Therefore, my original hypotheses need to be augmented:

Hypothesis 1

People in a high-income bracket are likely to live in formal dwellings, when compared with those in a low-income bracket. This will probably be higher among metropolitan and White households than among non-metropolitan and Coloured or Black households respectively.

Hypothesis 2

People in a high-income bracket are more likely to own their dwellings/houses when compared with those in low-income brackets. This will probably be higher amongst metropolitan and White households, as compared with non-metropolitan and Coloured or Black households respectively.

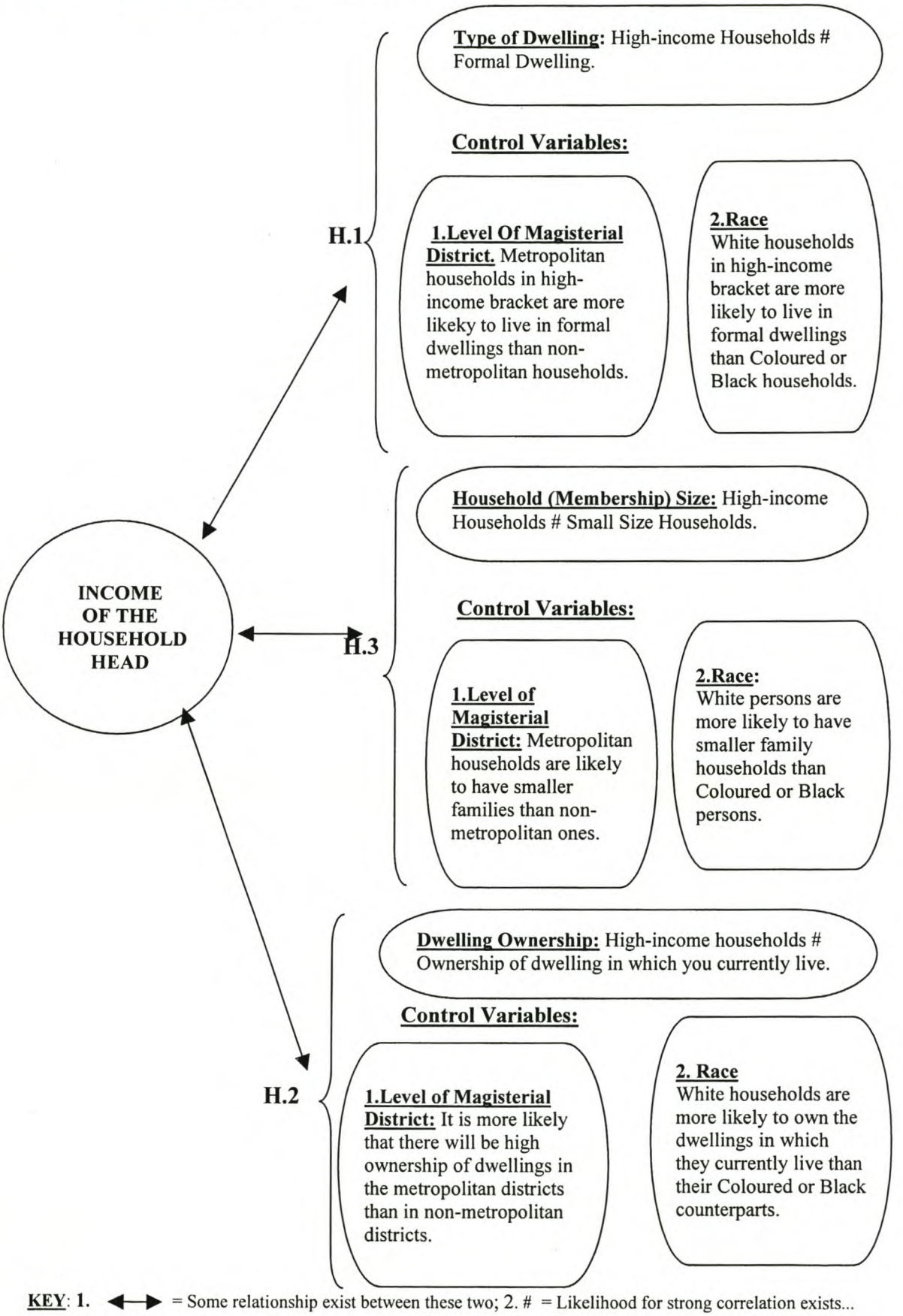
Hypothesis 3

People in a high-income bracket are more likely to have small (membership)☆ size households as compared with those in the low-income bracket. This relationship will probably be higher within metropolitan and White households than within non-metropolitan and Coloured or Black households respectively.

☆ **The household membership data excludes all persons below 15 years of age.**

These hypotheses may be schematically represented as follows: (below)

Figure 1: Schematic summary of the hypotheses:



KEY: 1. ◄► = Some relationship exist between these two; 2. # = Likelihood for strong correlation exists...

1.4 Methodology and Research Design

Collins (1987:256) maintains that research designs are in fact guidelines for investigative activity and not hard-and-fast rules that cannot be broken. What is implicitly highlighted in this statement is the flexible nature of study designs in social inquiry. This study was designed with these statements in mind.

This study was designed on the basis of secondary data - the 1996 version of the October Household Survey (OHS) data file. It is thus based on data collected from a sample of households in each of the nine provinces of South Africa, independently and systematically drawn. However for reasons of practicality, the focus of the study was limited to the Western Cape.

With regard to issues of validity, I assumed that, in general, the data collection methods, sampling procedures and the data quality were of high standard, as could be expected from a well reputed institution like the Central Statistics Service, (now Statistics South Africa).

Against this theoretical background, I decided to design the study by carefully selecting from the wealth of variables provided, those few that I felt were most important or relevant to the line of inquiry of the proposed study. These variables were to be statistically manipulated to produce findings that would be analysed in relation to the hypotheses. These include economic (i.e. income) and household variables:

- **Income**
- **Dwelling Type**
- **Dwelling Ownership**
- **Household Size**
- **Magisterial District**
- **Population Group/Race**

1.5 Definition/Clarification of key concepts

In order to facilitate clarity and better understanding of the study, the terms and concepts used are explained within the context in which they are used, as follows:

Secondary Data Analysis: Hakim explains SDA as "any further analysis of existing datasets which presents interpretations, conclusions or knowledge additional to, or different from those presented in the first report of the inquiry as a whole or its main results" (1982:4).

Family: Refers to two or more persons bound by birth, marriage or adoption and who share a name, meals and residence etc.

Household: OHS defines it a unit that consists of a single person or a group of people who live together for at least four nights a week, who share meals and resources.

Formal house/dwelling: Good quality house on a separate stand or a flat in a block of flats made from bricks and cement.

Informal dwelling: Refers to dwellings like shacks. They are normally made from poor quality materials like wood, corrugated iron or mud walls, and are normally associated with low socio-economic conditions or poor standards of living.

Head of the household (HOH): Refers to the father or anyone within the household who is regarded by the household members as the chief provider of food, shelter and other basic daily needs.

Living arrangements: Refers to a planning or structure for coexistence within a household, as in household membership size, dwelling type and dwelling ownership.

Alternative living arrangements: Refers to household units that are often of the non-kinship type and that reflect neither the traditional nuclear nor extended family structure.

Material basis of living arrangements of households: Refers to basic resources that are needed on daily basis for the livelihood of the household like income, shelter, clothing and meals.

Number of persons in the household: Refers to the size of the household in terms of the number of **adults** (in this case all persons 15+ years) who reside together and share meals.

Metropolitan districts: Those that fall within the metropolitan cities of Cape Town, Bellville and Tygerberg, etc. These districts are considered to be economically viable in the Western Cape Province.

Outside metropolitan districts/Non-metropolitan districts: Those areas further distanced from the main cities. They are usually smaller towns like Stellenbosch, Strand, and George etc.

New South Africa: Post-apartheid South Africa.

Population group: Racial classification of a particular group of S.A citizens. It became part of the apartheid policy that divided citizens into Blacks (Africans), Coloureds, Indians and Whites.

Globalisation: Currently unfolding worldwide economic phenomena characterised by integration of regional economic markets and general free trade between nations. However, some people think that this process has thus far only benefited the developed world and worsened economic vulnerability of the poor countries mainly due to economic and technological upper hand that the former enjoys over the latter.

1.6 Presentation of Contents

The study is divided into five chapters, which contain the following:

Chapter 1: Introduction, problem statement and hypotheses.

Chapter 2: Literature review (Households and Secondary Data Analysis). This chapter consists of two sections:

1. Households and living arrangements. It reviews the theoretical perspectives concerned, with a reference to various local and international case studies to provide a balanced perspective on the subject.
2. Secondary Data Analysis (SDA). Covers definitions of SDA, and then proceeds to highlight the rationale for the use of this methodology. Further points include the discussion around different approaches to SDA; the strengths and limitations of the use of SDA in conducting a research study. The chapter concludes with a reflection on the by touching on relevance and appropriateness of SDA methodology in the proposed study.

Chapter 3: Covers the methodological details of the study: i.e. data description, methods of data analysis, sampling procedures and data collection techniques and variable distribution.

Chapter 4: Presents the discussion of the findings.

Chapter 5: Covers the conclusions and recommendations.

CHAPTER 2: LITERATURE REVIEW: LIVING ARRANGEMENTS OF HOUSEHOLDS

2.1 Introduction to households and living arrangements

Recent macro-economic changes associated with the phenomena of globalisation are generally believed to have affected everyone in one way or the other. One of the aspects of human life where this effect can be noticed is in the living arrangements of households. Across the globe the structure of the households has changed since the 1990s. Apparently, there is a flux of household composition and size across the world, particularly in the developing world (including South Africa) today, and this factor has necessitated the theoretical review of the literature on households.

Studies conducted across the world have thus far revealed similar trends or pattern changes in the sphere of living arrangements within households. These studies reveal a remarkable shift away from the traditional models of (kinship based) nuclear and extended household units. In America for example, a study by Ahlburg *et al.* showed that while the traditional nuclear family unit remains the most preferred household arrangement, a "considerable variation continues to exist, depending on social and economic conditions"(1992:38). This suggests that alternative or new forms of living arrangements are becoming more common.

Such 'alternative' types of living arrangements have been observed in some countries, one of which is South Korea. According to Chang, in Korea the "economic conditions and social relations of many families proved to be too unstable to maintain sound family life"(1997:36). It would follow that a population characterised by such impoverished material conditions cannot sustain the ideal of a nuclear family as planned by government development policies.

In South Africa a study of the African population in Cape Town found that there were 'stretched' income-sharing units among the households sampled and that this might "throw any model of 'standard' nuclear family-based household into question"(Spiegel *et al.* 1996:25). What is illustrated here is the fact the circumstances of the household (i.e. member composition and size) are often correlated with the

economic situation of the breadwinners concerned. In this particular case, the negative economic impact that migrant labour had had made it difficult for certain sectors of society to sustain idealised small nuclear families or households, as husbands were periodically separated from their households to find jobs and generate income elsewhere, often far away from their homes.

During such prolonged absenteeism of these breadwinners (i.e. husbands or elder sons) from the rest of the family other members (often relatives) often come and join the household concerned and only leave at some later stage, mainly due to their own economic or material constraints. In this process, the size and composition of the households is then subjected to constant changes, which make it difficult for these domestic units to become idealised nuclear family households.

Another interesting study that confirms Spiegel's findings refers to a case study that was conducted by Singh (1996:97-116) in the community of Phoenix, an Indian urban settlement near Durban. This study reveals for example, how the traditional Indian kinship-based 'joint-family' survived, despite every attempt by the then local government officials to undermine it. The survival of this domestic unit to this day is attributed to the lack of housing, massive poverty, unemployment and poor wages, among other reasons. It was in fact these factors that, contrary to popular expectations, served to sustain and revolutionise the extended household types within the Phoenix community, and all this happened at the expense of idealised western model of a nuclear family type households.

It is against the above background that conceptual changes in the definition of a *household* as a unit of analysis (for assessing the living arrangements or any other topic) should be reviewed.

2.2 The definition of a household

The definition of a household has evolved over time as the shape, size and composition of this unit has changed. A few centuries ago, in a traditional agrarian setting, a household was primarily perceived as an institution of reproduction and child rearing that is composed of people who take care of each other. It thus served as

a source of emotional support and a vehicle for socialisation of its members. Economically, a household was a unit of economic production.

In the recent past, though, the household as a family unit came to be viewed slightly differently. In fact, theorists in the post World War II era distinguished between a nuclear and a so-called extended family and suddenly the size and composition of the household became significant in defining a nuclear family. For example, the nuclear family was defined as a household unit that is smaller in size and normally restricted to one couple and an average of (their) two children per unit. The extended family was often larger in terms of size (membership), given that, in addition to normal nuclear family, it also included other members who were not necessarily be kin-related to the rest.

The US Bureau of Census carefully distinguishes between *a household* and *a family*. It maintains that

> "A household may consist of one person who lives alone or several people who share a dwelling.... A family on the other hand is two or more persons related by birth, marriage or adoption and who reside together"(Ahlburg *et al.* 1992:5).

Thus in terms of the definition of the US Census Bureau, it may be the case that while all families form a household, not all households are families. However, for most contemporary researchers, the predominant notion of a household in the Southern African context refers generally to the criterion of shared income and resources.

It is in the above context that Spiegel *et al.* have come to define a household as "a group within which income and expenditure flows are concentrated, even if the members of that group are in widely dispersed parts of the sub-continent" (1996:12). They introduce the concept of 'stretched' households. These units are unique to our sub-continent, a factor that could be attributed to the periodical displacement of most male breadwinners due to the history of migrant labour policies.

Another definition of a household is derived from experiences of living arrangements of households among the South African Indian community. Case studies done in this community have identified the existence of a horizontally extended household, which may often include two or more brothers and their spouses and children. These are

defined as 'joint-family' households. However, it should also be noticed that this particular household pattern is derived mainly from the traditionally Hindu section of the Indian society.

In sum, therefore, it may be maintained that a household could be defined as that form of living arrangement that normally includes, but is not limited to the nuclear family or to membership based on kinship, blood or marriage. It actually encompasses other structures that go beyond the traditional nuclear and extended family units.

2.3 The current state of household living arrangements

The state of living arrangements amongst households is arguably, a reflection of the general material well being of the people concerned. This state is determined by various factors such the income levels, dwelling types, house ownership status, average household size, literacy and health rates. In each situation or country, these factors are influenced by and, to a large extent, reflect the conditions of the prevailing political-economy system, which is in this case, the phenomena of globalization.

However, researchers like Macfarlane and Daniels (2000:35) have argued that the effect of this globalisation process on the living conditions of humans has been negative and destructive. For example, it has thus far led to a crisis of poverty and social disintegration of cities into metropolitan sprawls on a worldwide scale. These researchers go on to maintain that these new urban sprawls are characterised by an urban concentration that, is "reaching levels where the (human) survivability itself is endangered" (2000:35). This study hopes to explore the implications of these newly emerging conditions that influence the organisation of the households in terms of structure and other basics that are necessary for its existence.

2.4 International experiences of living arrangements of households

Before the Industrial Revolution, the size of the family in the Western world was relatively large, usually extended by a set of kin relations and the group served as a unit of material or economic production. However, as society developed, and the workplace became separate from the home, the extended family system gradually disintegrated. In this new system a nuclear family household became the dominant household structure, a process that naturally reduced the household size and

simplified its composition replaced the pre-industrialised system. For example, in the United States, this phenomenon, as maintained by Sweet & Bumpass (1987:374), was marked by a steady decline in the patterns of households consisting of five or more persons and a parallel increase in the rate of one-person households, particularly during the period between the early 1970s and the mid-1980s.

However, according to the experiences of scholars like Gonzalez (1969), this process occurred to a large extent only in developing nations. In real terms, the poor or developing countries remained less affected, mainly due to their economic dependence on more developed countries. Gonzalez discovered that the dependence of the Caribbean households on migrant labour meant that, for most of them, poor income levels became a permanent feature that made it difficult to sustain nuclear type households. Once more this example suggests some form of association between the factors of the economy (e.g. migrant labour) and the organisation of the household.

Another significant development in the history of household transformation from large, extended units to smaller, nuclear types was the redefinition of women's roles, which was necessitated by the economic demand for more labour in factories during and beyond the period of Industrial Revolution. This shift in role influenced the structure of households and living arrangements as women now played a dual role as caregivers for their households, as before, and additionally as wage earners.

The above developments meant that like men, women had less time to spend at home and income generation was prioritised over traditional domestic responsibilities. This sudden lack of time for women to rear many children and effectively manage their households meant that these domestic units had to be restructured. Out of this restructuring process was the emergence of a nuclear family. Unlike the preceding household units, this unit became smaller in size and consisted mainly of members of the immediate family, to the exclusion of relatives or friends.

Against this background Chang (1997:28) developed his theory of living arrangements. Confined to his own South Korean experience, he advances an argument to the effect that nuclear households, theoretically tied to emerging

industrialised nations, have in fact been declining in favour of other household arrangements. His study shows that a large proportion of these alternative living arrangements are bigger in size and vary more in composition than the conventional nuclear family unit.

Chang points out that the different stages of human and industrial development necessitated processes in which the masses gradually adopted the family structure and family relations that responded to the requirements of industrial society. According to him, there is now a tendency for "families [to] devise new patterns of living arrangements to preserve, adopt or reinforce their support function for elderly, children and various other category of dependants"(1997:28).

One interpretation of the above situation could be that it contains an implicit argument to the effect that the diverse living arrangements that people opt for are also influenced by factors other than simply a choice or preference. Instead, it is often the considerations of economic survival (i.e. food and clothing) of the household and the vulnerability of individual members that determine the primary basis for any living arrangements that people choose.

Another contribution in the above regard comes from Sweet & Bumpass (1987:374). They hold the view that the US household structure experienced a rapid rise in the number of non-family households from the 1970s onwards. This development may be seen an indicator of the existence of flexible types of living arrangements. But one could also link this development to Chang's study (1997), which highlights similar experiences in Korea where he found an increased prevalence of flexible types of living arrangements. These were living arrangements that included elderly parents together with their adult children and their families, or horizontal households consisting of two or more units. The latter type consisted of kinship related or completely unrelated people who share the shelter and food provision.

From the above, it is clear that while living arrangement patterns do not always reflect a conscious effort to create mutual support within the household and, while they are not yet widespread, they nonetheless constitute an important part of the development of households in adapting to rapid social and economic changes. For example,

Chang's study revealed that Koreans, like their counterparts in Africa and Asia, have been subjected to the phenomenon of uneven development, as is the case in most developing nations. As a consequence of developments in Korea, "a large majority of Korean families have had to suffer the economic instability inherent in these non-industrial sectors" (Chang, 1997:30). Therefore the material conditions that dictate these patterns of living arrangements should be viewed against the background of general economic deprivation, together with the lack of adequate social welfare provisions in the face of high unemployment rates, and all the problems associated with these conditions (e.g. poverty, crime, poor health etc.).

This 'exclusion' of the majority of people from the benefits of modernised economies in developing countries can be attributed to the fact that some families were disadvantaged as a result of institutional discrimination in many social welfare programmes. Here, the argument that is often advanced to explain bias, is that "since policy-makers feel that large urban companies and government offices are the best places to start or experiment with new social programme"(Chang, 1997:30), it is often only a tiny minority that stand to benefit from such programmes. Consequently, these developments have led to a situation in which there is a prevalence of 'unstable' families, whose economic survival is sustained mainly from their engagement in peripheral (informal) sectors of the economy.

Also evident from the Korean case study is the factor of sharp increases in national income inequality and skewed distribution of wealth at the expense of the poor or the most economically vulnerable sections of society. As in the South African situation, the impact of these economic realities on the living arrangements of the poorer sectors of society was rather unfavourable. In his illustration of this effect, Chang points out that "housing ownership of Korean households has rapidly declined from 79.1 per cent in 1960 to 63.6 per cent in 1975, 58.6 per cent in 1980, 53.6 per cent in 1985, and 50.6 per cent in 1990" (1997:30).

The Korean scenario, which I think can be generalised to encompass other countries with similar backgrounds, clearly illustrates the point that currently, there is an ever-increasing number of families and households that cannot afford to sustain the high living standards or lifestyles that are associated with Western lifestyles. As a result

these people tend to opt for 'alternative' living arrangements that are more sustainable and affordable within their limited means. But above all, it is usually the ideal of mutual aid and mutual dependence that underlines these new household formations.

The factor of decline in house ownership in Korea over the years serves to indicate that "the most important material basis for nucleation, i.e. separate shelter (house) has been in decline" and further exacerbated by misdistribution (Chang, 1997:31). In turn, this situation further suggests that the type of living arrangements whereby more than one family unit share a dwelling are common in Korea, as is the case in the lower working class communities of Cape Town. The underlying factors behind this practice (dwelling sharing) are more often of an economic nature than otherwise.

In the light of the above facts, one may therefore argue strongly that the Korean experience clearly suggests that the state of the economy does influence the state of people's lives, including their living arrangements. This can be seen for example, in the fact that the decline in the Korean economy has led to loss of jobs, which also led to reduced affordability of purchasing houses or dwellings. In other words, a poor economic climate leads to poor capital to invest in housing and house ownership by the members of the public, among other things.

It is also possible that Chang's views can be conceptualised within the current realities of life whereby the post-modernist development theorists have begun to question the applicability of the process of nuclearisation of the households in developing countries. This reaction came in the wake of the finding that such household units could not be sustained as well in other (different) cultural settings and especially in a climate of widespread poverty.

It is thus in the light of the above contradiction (between climate of poverty and prevalence of idealised nuclear family type) that the relevance of the (modernist) ideal of nuclear family type of living arrangements in developing countries is questioned. History seems to suggest that such household types, while desirable and possible in western countries, are not always economically sustainable within the climate of poor economic conditions that are characteristic of developing countries like Korea. This

factor also reinforces the view that the state of the economy does have an influence of the general material wellbeing of households.

The above line of argument might be further refined when one considers that a typical patriarchal nuclear family in the developed western world, with a male breadwinner may be a factory worker, for example, and could at least afford to meet the most basic subsistence costs of his family. In this manner, it would mean that the independence of the nuclear family from kin pressure is secured, at least economically. However, in Korea (and other developing and poor countries) the possibility of such freedom are denied to a large number of potential nuclear family households, mainly due to the vulnerable state of their countries' economies. It therefore follows that living arrangements, as they exist in the Western and non-western countries, have been largely influenced by material factors that derive mainly from economic conditions of the respective country concerned.

Looking at it from a different angle, one may also argue that what the Korean experience reflects is the failure of the modernist theory of development to materialise in developing nations. In Korea as well as in Africa and some parts of Asia, this theory has failed to elevate the material conditions/standards of living of the poorer nations through replicating the Western experience, characterised by modern industrialisation, high technological and scientific development levels and generally high standards of living.

Instead, developments in non-western countries, such as Korea, have failed to replicate the success of developed nations as a whole, and have only improved the living conditions of a tiny portion of the population. The rest of the population in these countries (the majority) continue to live under impoverished conditions that are far from the modernist ideals of modern lifestyle, and this is particularly evident in the poor state of their households in terms of basics like employment, housing, health and literacy.

While still on the international scene, one may also draw lessons from the experiences of living arrangements in African and Asian (developing and poor) countries. The significant majority in these countries may be categorised as either developing,

underdeveloped or even undeveloped. Examples of each of these are reflected in a study conducted in these countries by the United Nations (UN. Report-95). Amongst its findings, this study revealed that while in the developed world the average household size is approximately between two and four persons, in the context of developing countries these are not only larger, but their membership composition also shows greater variance. Once more this situation suggests a closer association between small households and the developed economies of the Western world on one hand, and a similar association between larger and alternative households and poor/developing economies on the other hand.

The relative prevalence of wide variations and larger sizes of households in Africa is attributable, amongst other possible factors, to the economic conditions under which the majority of its population lives, characterised by the prevalence of agrarian and informal forms of the economy. Under these circumstances, the household's economic stability of these sectors is often not assured, and as a result, the turnover of members who leave or join a respective household for economic reasons is normally high. For example, through a variety of ways, like the adoption of (possibly orphaned) minors, or the co-option of old, sick and unemployed adults into the household (as is common in African culture), the size and composition of such households are usually subjected to constant alterations.

These alterations are mainly influenced by factors of material relevance, i.e. the households serve a particular social welfare role in society whereby those who are economically active cater for the material needs of dependants. Also important to note in this regard is the ever-increasing numbers of adults who join the ranks of the unemployed, who now also form part of these 'dependants' alongside minors, as they also rely on the breadwinners concerned.

Perhaps it is even more interesting at this stage to learn that the 'household evolution' is not a phenomenon limited to developing countries. There are studies showing that households in First World countries like America and Western Europe are also undergoing a process of change in terms of living arrangements. This change is highlighted in a study conducted by Ahlburg *et al* in 1995 in the US, where they point out that " the growth of the non-family household (that is non-kinship) is one of the

most dramatic changes to occur during the past thirty years. In 1960, 15 percent of all households were non-family households, by 1991, 30 percent were non-family units, and by the year 2000, 31 percent may be non-family households"(Ahlburg *et al.*1995: 5).

The above illustrations and figures point to the fact that there are underlying factors responsible for these changes in the composition of household units. Ahlburg *et al.* argue that in America: "the social, demographic, and economic factors have all contributed to the changing patterns of marriage behaviours". This factor makes the sustainability of a typical kinship-based, small, nuclear family an ideal that becomes a goal that for the great majority of households is difficult to realise (1995:5).

The experience of the realities of American families is an eye-opener to the public that the ever-changing nature of macro political and economic forces around the world can, and does have an impact on one of most basic socio-economic units of society, the household. It is in this (American) context that this impact has meant the diversification of the classical nuclear family. Since this process has rendered American households more complex than ever before, there has since been an appeal that: "recognising the diversity of American families and addressing the complexity of their needs must lie at the heart of policy debates on family issues"(Ahlburg *et al.* 1992:39). However, it appears that the experiences (of household diversity) described the above views are similar to those experienced locally as well. This view will become clearer when the situation of local households and living arrangements is looked at.

It can therefore be concluded that there are studies that suggest that in general, households' living arrangements are not independent from the broader economic climate in which they exist. The literature reviewed thus far also confirms an argument by Gonzalez (1969) that the ideal nuclear type of household emerges mostly when the general economic conditions of a respective country begin to offer to the bulk of its population job or business opportunities to generate adequate wages that can sustain reasonable standards of living and offer other life opportunities.

2.5 Local experiences of living arrangements

A Cape Town based case study of the African population in 1996 shares some similarities with international experiences regarding household formations and reformations. Another study conducted by Keenan (1988) in Soweto (a black township near Johannesburg) confirms the importance of the material/economic factors as basis for household arrangements.

The first commonality in the above studies is the way attributions are made about the role of external forces in affecting changes in living arrangements. From the views of Spiegel *et al.*, one can argue that the material factors on the basis of which a household is sustained are often determined by "broader economic, social and political structures and processes" (1996:13). This opinion is similar to those expressed by Ahlburg *et al.* and Chang about the international experience of living arrangements of households in the case of the US and Korea respectively.

The transformation of African households in South Africa has been greatly influenced by economic factors that manifested themselves in the notorious migrant labour policies and apartheid legislation. These include the Influx Control Act and the Group Areas Act, as well as the Coloured labour preferences (especially in the Western Cape), to mention but a few. To aggravate the negative impact of these laws on African households, the apartheid regime embarked upon "a purposeful restriction on African housing provision in the region, a factor that added to the constraints up to the 1980s" (Spiegel *et al.* 1996:13). This picture should form the backdrop against which the state of living arrangements of households should be analysed.

One of the ultimate outcomes of these political developments (i.e. apartheid legislation) was the emergence of 'stretched' household types, a feature that still characterises most African families to this day. It was discovered that most African households in Cape Town were sharing their income with other closely related households far away in the Transkei or Ciskei. As the study revealed, "many established domestic units became 'stretched' over the space separating Cape Town from the Transkei and Ciskei" (Spiegel *et al.* 1996:14). It follows therefore that economic factors like a migrant labour system, in this case, do have an impact on the

living arrangements of households, and hence the next section looks at illustrations of this point.

The Spiegel *et al.* (1996) study revealed that the large domestic units in the Western Cape are formed on many different bases. The study makes reference to a particular incident where a household consists of 11 adult members (some of whom were couples) and four children. The fact that this household depends on only two small incomes serves to suggest amongst other things that lack of sufficient income is the main determinant of the household's large size. Situations like this suggest there is a possible strong association between poor income and large size households, especially where more than one family share a dwelling and meals.

The above example strengthens the argument that the notion of a 'stretched' household derives mainly from the factor of economic instability where the breadwinner is often physically separated from the rest of the household for the greater part of the year, but on whom the whole household depends. Such survivalist living arrangements are very important in the face of lack of social security provisions (welfare) and difficulties in securing better jobs, particularly in the case of black people.

The dependent nature of the 'stretched' households on migrant labourers' incomes, has subjected these household units to regular changes in terms of size and composition. "All the cases indicate extensive movement of individuals between residential and communal units, and resulting frequent changes to the size and structure of these units" (Spiegel, 1996:23). This statement highlights a typical scenario whereby financial factors impact on the structure of the household and thus rendering such households more complex than is often imagined. It follows that economic factors are an important consideration in attempting to understand the social organisation of households. Below, a look at the living arrangements among the Indians community in Durban serves to illustrate this fact further.

The picture painted thus far about the state of local living arrangements can be augmented by referring to a case study of the South African Indian population in Phoenix, near Durban. Singh's (1996) study in this community revealed that, traditionally, the Hindu Indians lived in joint-families that became kinship-based co-

operatives. However, these families also served as "effective barriers against unemployment and social alienation" (Singh, 1996:101). This is a typical example of a situation in which economic (income) considerations directly influenced the course of living arrangements of people within households. In fact, this study's findings seems to point out the fact that even then, joint-families had an economic or material purpose to serve in that community.

There are of course other reasons why joint households were sustained and prevented from fading away with time. These may include the imposed housing backlog[1] that was aimed at breaking the institution of extended or 'joint-households' amongst the Indians. However other explanations in this regard could be that the ethic of kinship responsibility was too entrenched within the Indian society, and hence it survived against both the influence of western civilisation and sinister efforts by the apartheid government to undermine this kinship spirit. Contrary to the expectations of the apartheid establishment, decades later, there still exists an overwhelming sense of responsibility among young Indians to care for their ageing parents and other dependants.

Without underplaying the influence of other factors, the role of economic factors in the household dynamics in Phoenix can be further illustrated by the following example. Due to factors like the housing backlog, unemployment and impoverishment, "a process of restructuring domestic units occurred in which residents have demonstrated a greater degree of flexibility than conventional interpretations suggest" (Spiegel *et al.* 1996:101). This means that the above economic factors collectively contributed towards the fluidity of households in Phoenix. This fluidity is characterised, *inter alia,* by the impermanence of household structures due to *ad hoc* strategies in living arrangements, which are implemented on the basis of their financial benefit to the general welfare of the host family.

[1] In January 1927, the so-called **Cape Town Agreement** was signed which had as one of its stipulations that Indians who wished to remain in South Africa must be prepared to adopt Western 'standards' i.e. be prepared to abandon large extended or joint households for smaller nuclear households. To ensure this, the government of the day started building houses for them (since 1940) whose size and design would only permit occupation by a smaller household. The idea was to stop or discourage the co-habitation of more than one family per household or any forms of extended family.

It is clear that the current fluidity and flexibility of households in Phoenix is economically motivated, given the statements that such flexibility includes unofficial and illegal sub-letting in City Council flats or dwellings, to relatives or friends for a fixed amount of rent per month. Often such agreements are informal. Once collected, these rent monies are collected from sub-tenants, and are often used to complement the meagre wages that are common in that community. As such meagre wages result in shortfalls in family budgets, this factor "justified the incorporation of additional families on the basis of the need to meet the most basic of family budget demands" (Singh, 1996:109).

One may also argue that the arrangement of joint-families (referred to above) is a reflection of some of the survival strategies often used by financially desperate households. It highlights the primacy of economic considerations in the incorporation of families, where the essence of the business revolves around the ability of the incorporated family to pay rent on time, even though other factors like kinship, religious and linguistic commonalties between families may play an important role. However, above all these other considerations, it is the failure of the incorporated members to meet their (negotiated) rent commitments that often results in termination of the co-habitation: a factor that further highlights the economic nature of such a relationship.

A more flexible approach is often followed in subletting to a family or an individual in Phoenix. This practice has in turn contributed to the complexity of such households as their sizes and compositions are subject to constant change. However, when parallels are drawn between local Indian (Phoenix) and African (Cape Town) experiences of living arrangements, the household structure is influenced significantly by the financial viability of role players (i.e. rent payers and breadwinners respectively) in both cases. Arguably this factor reconfirms the role of material factors as the bases for these 'alternative' households and their living arrangements.

Keenan (1988)'s study supports the above views and conclusions. His study in Soweto in 1986 revealed that the respondents lived in households with other people, many of who had become unemployed. This factor - the increased dependency ratio within households - served to undermine the government's rhetoric that the general

economic conditions of blacks (Africans) had been improving during the 'reform era' - 1978-1986. It also reinforces the view that the economic situation of fellow household members, i.e. employment/remuneration status, is crucial in influencing the household living arrangements.

2.6 Concluding summary on living arrangements and households

There is a need for a better understanding of the social, cultural and economic processes that affect people in their everyday lives. This can be achieved partly by conducting studies that focus on the relationship between types of households and the socio-economic profiles of the occupants concerned. The analyses thereof can serve, not only to highlight the nature of such relationships, but also the general basis on which these different types of households are formed, reformed or sustained. Exploring the nature of this relationship then poses a challenge.

This challenge can be met within the context of a multi-disciplinary inquiry. Such a holistic approach is relevant, particularly in view of the fact that "sociologists and anthropologists alike have been interested in the functions that family members perform within households, while economists have focused on the household as an economic unit" (UN, 1995:91). What is expressed here is the fact that a typical household incorporates both the social and economic aspects of life that make it a dynamic institution. Hence a multi-disciplinary approach will serve to provide a better understanding of the interplay of the socio-economic developments in the social organisation of the households, and how these impact on the living arrangements of people.

The review of the literature has demonstrated the existence of an uneven allocation of material resources amongst populations across the world. This factor evidently plays a role in the decisions that people make about their living arrangements. In other words: it is this factor that determines the aspects of their households like size and membership composition, and the level of the complexity of such household living arrangements. For example, an observation was made by Sweet & Bumpass (1987:374) about trends showing the increase of smaller and non-nuclear family households in the US. It follows therefore that while the average size of the household

reflects the economic success of the US, the composition of these households (i.e. non-nuclear type) run counter to the model of a modern/western household.

Likewise, other studies provide evidence that suggests that some "household living arrangements other than the nuclear household are prevalent in many (developing) countries" (DHS, 1991:1558). These 'alternative' living arrangements'[2] are attributed to international economic developments like globalisation, over which the majority of people often have no real control. Mnyanda and Coyle (2000) argue that due to this process (globalisation), the gap between rich and poor countries has doubled over the past 40 years, resulting in a ratio of income between richest and poorest nations of 1:37, i.e. the households of the poorest nation earn R1 for every R37 that their counterparts in the richest nation earn. As a result, most households have to face the challenge of negative factors like high levels of inflation, unemployment, poor health and crime. The Korean experience in particular bears testimony to this fact.

The Korean experience shows that only a tiny minority of the population benefited economically from its export-led economy, and hence it is only this minority that could afford to sustain the nuclear family households (Chang, 1997). The rest of the population were left out of economic mainstream, and therefore had to seek 'alternative' means of survival. In a similar manner, an American experience (Ahlburg *et al.*1995) also illustrates how socio-economic changes like gender equality and an economic recession have influenced US society's notion of the nuclear household. Their study shows a continuous decline in nuclear family households and a corresponding increase in 'alternative households.' However like elsewhere, these households are as complex as societal dynamics themselves.

Some of these international experiences have been shared by South African households, such as those in Phoenix and Cape Town, as their respective case studies reveal. Migrant labour policies and other apartheid legislation have impacted on living arrangements of their households as they deprived the Indian and African population groups of adequate housing, jobs, and education and general social welfare benefits.

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[2] Alternative arrangements in this context refer to those living arrangements other than classical western nuclear type households. These include but are not limited to the traditional extended household.

In both cases, it led to the prevalence of a climate of massive poverty, unemployment and general difficulties in coping with even the most basic demands of life subsistence. In response, people organised their households along various living arrangements lines, which were primarily geared at improving the economic security of members concerned. This situation thus gave rise to household models that did not reflect a western modern nuclear household model, e.g. stretched-households amongst Africans in Cape Town and joint-families amongst Indians in Phoenix.

In general, the lessons from all these case studies, both locally and abroad, lead to the conclusion that broader political and economic changes (*e.g.* civil rights struggles, national market recessions, the current globalisation process) that are sweeping across the world have socio-economic implications. Their negative impact (so far) on the lives of many people around the world lies in the major changes that are seen in the living arrangements of people today. Some like Mnyanda and Coyle (2000) even go on to claim that due to globalisation, more than half of the world's population today live in dire poverty, despite phenomenal growth in global wealth. Consequently, these factors tend to influence people's decisions about their living arrangements in terms of household size, composition of membership and dwelling ownership.

In the light of the above arguments, I share Spiegel's view that "the concept of a household as domestic unit with relatively static composition has become inadequate to deal with empirical household realities"(1996:5). In other words, this view suggests that some adjustments are necessary in the conceptual definition of households, as the current categorisations of these units into either nuclear or extended units fall short in fully appreciating the current realities imposed upon these units by structural economic changes over time.

This chapter has focused on the historical development of a household as a socio-economic unit in society. It looked at how the modern household evolved economically from the days of the industrial revolution until the current era of globalisation. However, the specific focus has been on the effect that each of the economic stages has had on the lives of people. I have shown, for example, how a pre-modern family or household was relatively larger in terms size: - a situation that was brought about by the need for more manual labour in the mainly agrarian rural

economic situation that prevailed at the time. For these households, the availability of manual labour meant a better prospect for self-subsistence and this encouraged people to have larger size families.

However, it was also apparent that all these pre-modern household features were subjected to changes imposed mainly by the economic demands of the industrial revolution, which represented a period during which domestic and manual labour system was replaced by a wage labour system in factories and professional organisations. Practically, it was argued that these developments encouraged smaller size households, particularly in the developed world, while conversely, the unfavourable economic conditions in the poor and developing worlds promoted an opposite trend. This therefore suggests that there is a correlation between the national economic conditions and the state social organisation of the households in a particular country. It is on the basis of this supposed correlation that the argument (e.g. Gonzalez's) about the relationship between the economy and living arrangements is supported.

CHAPTER 3: THEORETICAL FRAMEWORK FOR SECONDARY ANALYSIS

3.1 History and definitions of Secondary Data Analysis

Normally, any researcher contemplating a research project automatically thinks in terms of collecting new data. However, due to progress in the field of social research, it is now possible for a prospective analyst to conduct his/her study solely from (existing) data that was collected by others. This practice is better known as Secondary Data Analysis or secondary research. In this section, I will discuss various definitions of secondary data analysis. These definitions range from very narrow definitions to more extended ones as are discussed by Hakim (1982), Dale *et al.* (1988) and Stewart (1984) to mention but a few.

According to Hakim, secondary analysis may be defined as "any further analysis of an existing dataset which presents interpretations, conclusions or knowledge additional to, or different from those presented in the first report on the inquiry as a whole and its main results" (1982:1). At its simplest, "secondary data analysis may involve a mere critique of primary research findings and conclusions" (Boruch *et al.* 1982:1). However, these definitions constitute a rather narrow definition of secondary analysis, formulated with reference to academic surveys and opinion polls. Normally, such surveys "are designed to provide data that is relevant to previously specified questions and hypothesis and normally, the assumption is that the original research report will have exhausted the information relevant to the main topic of concern" (Hakim, 1982:4).

It is interesting to learn that important developments in the field of science have also enabled a broader definition of secondary data analysis to be conceptualised. They include the introduction, in the 1970s, of nationally based multi-purpose surveys like the General Household Survey (GHS) in Britain. Such surveys are carried out on a continuous basis or repeated at regular intervals by respective government departments. Therefore against the background of these developments, there has emerged a much broader definition of secondary analysis. Hakim (1982) suggests that this definition implies increased access to computers for the analysis of secondary

data derived from multi-purpose surveys that are designed particularly with secondary analysis in mind.

These developments led to the general improvement of secondary analysis: in the US and in Britain the governments "moved from an emphasis on statistics derived from administrative records towards an emphasis on data from sample surveys" (Hakim, 1982:3). In line with these new developments, Stewart (1993:11) has suggested that secondary analysis be broadly defined as, "any further analysis of one or more datasets that address an issue quite different from that which prompted the original data gathering effort".

Secondary analysis may be utilised as a complementary methodology. This means it may be used to complement findings of original research rather than as a substitute to it. Alternatively, secondary analysis may also involve the integration of information from several sources or a re-analysis of the data from a single source. These factors inform the broader definition of secondary analysis as research tool that allows for researchers to come up with various designs that would not have been possible before. For example, as Boruch *et al.* maintain, "secondary analyses may involve the re-analysis of individual records and collection of information to increase the original records interpretability and usefulness" (1981:1).

Another way of defining Secondary Data Analysis originates from Programme Evaluation research. Scholars in this field of research define it as "the analysis of evaluative and policy relevant data, usually in ways other than those used in the original analysis, for example, testing new theories or hypotheses on data generated from evaluation of social programs, testing new methods of analysis on data that are well understood, and verifying the credibility of original findings through the reanalysis of micro data" (Boruch *et al.* 1981:1).

Contrary to some perceptions, the concept of secondary analysis does not necessarily imply that the importance of the analysis or the quality of data is any less than that of primary research studies. In fact, secondary analysis has become an important method of social research both in government and academic circles, and its popularity is attributed to the emergence of nationally based survey data archives and invention of

more sophisticated statistical software packages for the analysis of quantitative data, like SPSS. Consequently, these developments have given 'widespread access to computers for data analysis,' although some may contend, that "the creation of multi-purpose surveys, (e.g. the GHS in Britain) explicitly designed for secondary analysis is perhaps at present the most significant stimulus to secondary research" (Hakim, 1982:12).

It is also important to note that in practice, primary and secondary research (analysis), are "used in a complementary fashion, rather than as substitutes for one another" (Hakim, 1982:12). This implies that these two methods of data analysis are mutually exclusive but serve to make up for the limitations of each other. This (complementary) role is realised particularly when secondary analysis entails the integration of information from several sources to reach certain conclusions or through the re-analysis of same data for verification purposes.

In summary of this section the various definitions of secondary data analysis are given below:

- The further analysis of the existing data to address different research questions than those of the original study;
- A mere critique of the original study's findings and conclusions;
- Utilisation of large datasets from multi-purpose surveys to design the type of studies not previously possible;
- Studies conducted on the basis of Programme Evaluation data for confirmation of the findings thereof.

However, Dale *et al.* (1988) maintain that although it is neither practicable nor necessary to attempt to construct a watertight definition of secondary data analysis, it could nonetheless be readily typified. In the next section I will examine various reasons why Secondary Data Analysis is important in social research: i.e. the rationale for secondary analysis.

3.2 The rationale for secondary analysis

There are several motives or reasons for researchers to conduct an analysis of secondary data. The major motivations for the practice of secondary analysis include

considerations regarding research budgets, time constraints often involved in the access and collection of data and even the feeling amongst intellectuals for dynamism and innovation within the domain of social research. Therefore the discussion of these reasons will inform the greater part of this section.

There are intellectual motives for conducting secondary analysis: these stem mainly from the fact that researchers in general and secondary analysts (researchers) in particular, are seldom satisfied with merely descriptive findings, as is the case with most survey studies[1]. This implies that there is always a temptation amongst (social) researchers to search for explanations to account for mainly descriptive findings. Such an attitude amongst researchers encourages the use of secondary datasets because the latter often contain sufficient data from which to extract the necessary information to account for descriptive (survey) findings. In other words, secondary data analysis has become important for its explanatory potential that it offers to researchers.

As a way of exploiting this explanatory potential, secondary analysts often conduct their research in the form of a reassessment of data from major Programme Evaluations. Viewed from this perspective, secondary analysis is often considered as a vital intellectual research practice as it promotes competing analyses, an aspect that directly serves to advance the course of science. In addition, secondary analysis is also viewed as a "constructive activity whose goals are fundamental to science, since the verification of the quality of information and analysis... that analysts sometimes readily identify egregious errors is evident from the re-examination of early files" (Brooch, *et al.* 1981:4). However, it follows that such efforts do not necessarily imply that the findings that emerge will always be less ambiguous.

Secondary analysis can also be cost-effective: its practice allows for the maximum utilisation of resources (data) that are generated at a minimal cost relative to their (information) potentials. In other words, in secondary analysis an "expensive dataset is used for several purposes" (Borough *et al.* 1981) and as a result therefore, this research method has now developed into a new 'laboratory' for the social sciences

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[1] The purpose of basic research that goes far beyond describing facts (descriptive function) is hereby contrasted with that of surveys that primarily focus on fact (how things are and not why they are as they are).

with marginal additions to the investments in the original research. For example, secondary analysis of recent evaluations can save the researcher or the taxpayer the cost of conducting another evaluation study. It also improves the research skill and experience of scholars or students in the art of secondary analysis. This educative aspect of secondary analysis is of considerable value, given the lack of experience in this field of social inquiry.

In further justifying their growing interest in secondary analysis, some scholars (Borough *et al.*) go on to argue that such analysis is methodologically aligned with the emergence of another major area in applied social research, that of meta-analysis. Given the recognition that "secondary analysis is a crucial prerequisite to the aggregation of statistical estimates necessary for meaningful meta-analysis"(1981:4), it can be argued therefore that skills acquired in secondary analysis are a vital component of meta-analysis. This argument is particularly relevant when one considers that the practice of meta-analysis involves reviewing the results of studies and the combining of statistical estimates of program effects.

There are also those who advocate regular use of secondary analysis by emphasising the role that it could play in social research. They argue that there are two main roles to which secondary analysis can be assigned in any particular project, and Hinde (1991:250) identifies these: First they might be used in a subsidiary role- where one's own primary research or theoretical development is the main thrust of the work. This means that secondary data here could be used to provide a context within which to start one's work. Hinde (1991) for one, made the use of data on smoking behaviour from GHS (in Britain) to study the incidence of smoking among teenagers. Consequently, he found that this approach not only adequately tackled the research question, but also spared the him problems that are involved in conducting a primary study like financial costs and (data) access.

The overall justification for the use of secondary data in this study lies with its unique potential for the researcher. This refers to the possibility that the analyst can analyse previously collected data in a new way, because "some re-analysis of earlier datasets may be necessary to allow direct comparisons to be made between new and earlier studies' results" (Hakim, 1982:17). This role is in line with another argument that

secondary analysis, through its wealth of information on new topics, issues and policy concerns, can provide a basis for getting new issues onto the political agenda or filling information gaps and thereby specifying new research needs. Hakim (1982:17) further gives a few good examples from Britain where secondary analysis of existing sources played a part: Such instances include some study findings that revealed, *inter alia:*

- The recognition that the single parent family was becoming dominant as a new type of family structure (in Britain),
- The unfair discrimination against ethnic minorities in council housing, and
- The changes in race and class patterns in home ownership system

The value of secondary data can be seen in that the above findings were used, *inter alia*, as the basis to review and to challenge the British local authorities on what appeared to be 'systematic' discrimination against the ethnic minorities in the provision of housing. According to Stewart *et al.* (1993) these examples highlights the fact secondary data analysis could also play a bigger role in research problem formulation as for example, new studies could be conducted that focus exclusively on race policy of identified local government structures. This possibility could also apply to the design of new research and for the analysis and interpretation of new information.

In this section, the rationale for doing secondary data analysis was discussed. The focus was primarily on the reasons why this type of research has recently become such an important undertaking in social research. These reasons vary in categorisation from those that emphasise the financial convenience of this method to those that are purely intellectually motivated. Also highlighted was the role that secondary data analysis can play in the development of social research in general, and this is the basis for the call to promote and encourage the use of this method in social research. The next section will explore the circumstances that determine the use of different approaches to secondary analysis.

3.3 Approaches to Secondary Analysis

There is a common central idea that informs the various approaches to secondary data analysis. This is the understanding that this process does not necessarily imply that the focus of the secondary data study is different from that of the original analyses, but that existing datasets may be re-analysed with more sophisticated statistical techniques. This section will therefore consider the different approaches in secondary analysis. Depending on the study objectives, the specific approaches may either be of a confirmatory or a complementary nature: i.e. meant to confirm, complement or validate the findings of the original study.

In a confirmatory approach, secondary analyses may be conducted specifically to investigate the same issue or topic as the original study. In such instances, the role of secondary analysis can confirm or challenge the results of an original or primary survey. In this approach that the reanalysis of data is often conducted using more sophisticated analytical techniques (e.g. multivariate analysis) rather than simple cross tabulations, which often characterise the original research reports.

However in a complimentary approach, "primary and secondary research data may be used in a complementary fashion rather than as substitutes for one another"(Stewart, 1984:13). This implies that secondary analysis of datasets can be coupled with or complemented with qualitative studies. Such qualitative methods may include data gathering through various means like in-depth interviewing, ethnography or participant observation as these can provide valuable information, insight or better understanding of relationships observed in the survey findings. As a result then, the findings would enjoy broader and more meaningful explanation than before, as Dale *et al.* (1988) illustrates below.

According to Dale *et al.*, the relevance of the complementary role of secondary analysis derives from the fact that "a great deal of material available for secondary analysis is cross sectional, and this makes it impossible to distinguish the direction of causality between associations" (1988: 41). It follows that in a context of such uncertainty, causality may, at best, only be speculation. However, this problem can be overcome by the fact that "a qualitative research study can provide an indication, although not quantifiable, of whether results from cross-sectional data may be

misleading"(Dale *et al.*1988: 42). In this manner the secondary analyst can make use of what is already known and available in secondary resources to improve the validity of the study.

In other words, the relevance of complimentary approach in secondary research lies with the fact that it may provide an in-depth perspective. An in-depth study is often desirable when one considers that most of the large multi-purpose surveys on which secondary analysis is conducted contain data that is mainly descriptive in nature, while secondary data analysis is often carried out by academics who are interested in the causes underlying human behaviour. It does therefore become useful to use other (data) sources that can shed light on data that is given or omitted (due to missing information) by the cross-sectional data of the original survey.

The above section covered the different approaches that may be adopted in effecting the different roles of secondary analysis. It was argued that the choice of each of these approaches is often informed by the objectives of the study: which may either be to complement or to confirm the findings of a particular study, which on its own does not provide adequate explanations. However, one view underlying all these different approaches is that the rich information already contained in the primary data sources should be used to improve the quality (e.g. validity status) of the studies that have already been conducted, in order to save more costly primary research aimed at simply confirming or complementing existing findings. In this manner, time and money can be saved. This aspect is further explored in the next part of this chapter, which focuses on the issues of methodology and research design in secondary data analysis.

3.4 Issues of methodology and research design in secondary analysis

In this part of the chapter, the focus will be specifically on how the issues of methodology and research design apply to secondary analysis. Particular emphasis will be placed on the methodological issues that a prospective secondary analyst must consider prior to any analysis. In addition, an examination of various research designs will be made with a view to highlighting the relevance of the proposed study to the special methodological considerations of secondary data analysis.

2.4.1 Prior methodological considerations

According to Stewart *et al.* (1984), the process of data collection in any research project is purposive. This implies that in any single undertaking of secondary analysis, not all information obtained from secondary sources would be equally valid or reliable. Hence, before a secondary analyst begins to analyse specific data files in his/her research project, there are specific design and methodological considerations that need to be attended to. This line of argument is compatible with Fortune and McBee's view that "both the quality of the data file and the validity of the secondary analysis depend on the care, the accuracy and the thoroughness with which the data file is prepared and on the quality of the primary data bases" (1984:29).

It follows from the above paragraph that the secondary analyst would normally be faced with the challenge of ensuring that the conditions of the primary databases, as well as research requirements of the file to be used, are compatible with the intended analysis. The analyst must ascertain for example, whether these documents contain relevant sample sizes or whether they are drawn from the relevant populations, i.e. the evaluation of secondary sources. Practically, this means that the procedures of data analysis, data collection, categorisation, concept definition, sampling and design that were employed in the first study should be evaluated with regard to their relevance, purpose (topic), age and quality of data in order to ascertain their level of compatibility with the purpose or methodology of the proposed secondary analysis. Their degree of compatibility should indicate their reliability and validity potentials for study purposes.

In this context, the issues of the sample size, sampling design and the response rate of a survey are of particular concern to the secondary analyst. Further, as Stewart (1984:23) maintains, the questions concerning the source(s) of the data, measures used, the time of data collection, and the appropriateness of analyses and conclusions should be raised routinely. Large, nationally representative and reliable datasets will definitely be of greater interest than data that are more limited in any one of these respects (Hakim, 1982:9).

However, secondary analysts often tend to overlook the need for file preparation and the difficulties that are involved this process (i.e. file preparation) remain one of the

earliest challenges for the (secondary) analysts. This task varies in its complexity depending on the research requirements of the planned secondary analysis and the conditions or characteristics of the primary databases. Hence in order to fully exploit and realise the potential of hierarchical surveys, most secondary analysts will need to derive new variables from the information held at more than one level of hierarchy.

On a methodological level, such (necessary) prior considerations may include the requirement that the secondary analysts should evaluate some of the existing indicators inherited from the original dataset. With the availability of many large surveys today for example, it has been found that variable operationalisation is no longer a problematic process because through prior arrangement, multiple measures are available when such surveys are being designed. The recent experience shows that secondary analysts use analytic techniques to evaluate the relationships among existing measures. This procedure is carried out with the effect that the covariance of structure and analytic techniques can, for instance, allow the researcher to test models of the relationships between items.

Conceptual considerations are also important at this stage in a secondary analysis study. For example, there is often a possibility that, based on the analytic techniques such as those in the LISREL program, the researcher can predict which items will comprise each factor or construct. This implies that the LISREL technique provides information about which model parameters need to be specified in order to improve the fit between the items and the available measures. According to Kiecolt *et al.*) once such information is available, it enables the researcher to make better predictions about which variables will make up each construct, and whether the constructs will be correlated with each other, and so forth" (1986:55.

To illustrate the nature of the conceptualisation process in secondary analysis, Kiecolt *et al.* (1986) make reference to the application of the LISREL technique in a study by Acook *et al.* In this particular case, the study items were designed to measure political efficacy, and the use of the LISREL technique enabled tests to be conducted to establish if there was a fit between the measures and the concepts. The findings of the tests showed that the fit between concepts (e.g. political efficacy) and the items that were supposed to measure them was rather poor. Therefore Kiecolt *et al.* point out from this example that it could be argued that "analytic procedures such as those in

the LISREL program may have great potential for researchers who wish to evaluate existing indicators of various concepts and employ them in the analyses" (1986:56).

3.4.2 Research designs in secondary data analysis

Various study designs that can be achieved through secondary analysis and this section will consider how a secondary analyst can construct designs for different types of studies - exploratory, explanatory, confirmatory, or even time-series design studies. The potential for designing for a triangulation of comparative or complementary studies in secondary analysis will also be discussed.

Among its other possibilities, the use of secondary data can enable the researcher to design a comparative study. This potential may entail the concurrent re-analysis of old survey data in two or more countries, an initiative that would be very difficult to achieve through primary research. In the light of this it becomes clear that, for many researchers, secondary analysis provides the only way of doing this kind of work. However, comparative designs also come with their own set of challenges. According to Dale *et al.* one such challenge lies in the "task [of bringing] together a group of co-operating researchers in a number of countries and agreeing on a questionnaire in which the question wording has the same meaning for respondents in each country is daunting. To get such an undertaking funded is even more difficult" (1988:49).

However, besides the above technical limitations, comparative designs across countries may further be hampered by legislation, as it is common practice for countries to have data protection legislation that bans or limits the exportation of data for use outside the national borders.

Another design that is possible in secondary analysis is known as the time series design. This design possibility is attributed directly to the availability of continuous national annual surveys, like the General Household Survey (GHS) in Britain. The availability of similar data from different years makes it is possible to conduct a true longitudinal analysis or a comparison study of same phenomena over time. To illustrate the above point, Dale *et al.* give an example of the GHS (UK) surveys whose data has been stored since 1971 (1988:53). They argue that such data can for

example; provide a means by which changes over time in the characteristics of British households can be tracked. Such changes may be seen, *inter alia*, in the composition of households, income of different social groups and participation in the labour market, to mention but a few examples.

Through the use of the cross-sectional time series designs further significance of secondary data can provide a time dimension of the research topic. Dale *et al.* (1988) refer to an example of a study in the United States that was aimed at measuring the change in women's sex role attitudes between 1964 and 1974. Through time series design, this study could give a time dimension of such attitudes over a ten-year period. It follows that only through the help of secondary data could such a study be designed for and therefore an informed assessment of progress was made possible.

Secondary data analysis studies are also able to accommodate method triangulation design in research studies. This is particularly possible in situations where (quantitative) secondary survey data are complemented by qualitative data to provide meaningful interpretation or analyses of the descriptive findings typical of survey data. Practically, this arrangement entails the use of data sources that cover the same topic but differs in terms of time frame, analysts and methodology, as Hakim (1982) illustrates. He refers to a study by Leggart in 1974, which resembles this kind of design whereby new data were collected as an adjunct to a secondary analysis of an existing dataset.

In this case, the study entailed a re-analysis of a survey data on industrial companies, which was meant to test the hypothesis that less bureaucratic, more flexible and open-ended management styles would be strongly correlated with greater commercial success, and new data on the commercial success of these companies. The latter were extracted from the annual reports deposited at Companies House. This particular case serves as an example of how descriptive findings from previous surveys were complemented by qualitative data that was generated from in-depth interviews with various stakeholders in the company. However, the second analysis in question produced findings that proved the hypothesis to be wrong. This then illustrates how secondary analysis of old data, on its own or coupled with new data, can enhance the possibility for meaningful interpretation of the findings.

So far this section has covered four different types of research studies that can be designed for from the basis of secondary data. These included comparative, explanatory, complementary or time-series studies. Using examples, this section also illustrated how it was possible to construct a triangulation design in secondary analysis. All these examples illustrate the wealth of information and the freedom of study design that secondary data analysis affords to individual researchers. Arguably, the above examples implicitly confirm the views that were advocated by Dale *et al.* (1982), which maintained that datasets derived from separate sources but based on compatible, or comparable definitions and classifications can readily be used to complement each other in multi-source studies.

3.3 Strengths and advantages of secondary data analysis

There are certain key advantages to secondary analysis that make it preferable to primary research studies in certain circumstances. Such advantages derive mainly from certain strengths and potentials that are exclusively offered by the use of secondary datasets. These advantages vary from those that are specifically methodological in nature to those that are more academic in orientation. However, other advantages that are of general importance to the course of social research will be highlighted.

3.1 Methodological potentials of secondary analysis

Secondary analysis offers unique methodological facilities for data analyses that are not possible with primary analysis. This exclusive potential derives mainly from the fact of the existence of hierarchical surveys like the General Household Surveys (GHS) in Britain, which are designed with the later use of secondary analysis in mind. This implies that through the secondary analysis of such hierarchical datasets the analyst can, for example, (in the study of households) examine interrelationships between the various characteristics of various household members.

In the above context, studies may be used for example examine the relationship between the age and gender of the dependants in a household and the relationship of such respondents to the head of the household. In this manner that the dynamics in the composition of the household can be ascertained, for example. This means that the

analyst can explore for example, if the nature of the bonds or relationships between people within a household is mainly of an economical, or simply a biological or emotional nature. Through such analysis, one may also examine whether variables like gender; age or education have any influence on patterns that will be identified by the study findings, as in the case of an analysis of the research topics such as 'basis for living arrangements', for example.

Another potential of secondary datasets is that the analyst is able to link information between all levels of the hierarchy. According to Dale *et al.*, this implies that by using datasets from previous surveys, it is not only possible to link the information between the household and the individuals, but also between the different people at the same time, at the same level, for example, between husband and wife (1988: 165). However, they do add a caution that in order to carry out any kind of analysis using standard software, it is necessary to produce a flat or 'rectangular' file within which you can analyse all the variables at the same level, household, family or individual.

The analytical potential of large continuous surveys like the General Household Survey (GHS) in Britain or its South African version, the October Household Survey (OHS), is so large as the datasets include so much data on so many aspects of the respondents that the data is so extensive that "no single researcher or research team could hope to fully analyse the results" (Hakim, 1982:15). This illustrates that extensive analysis has been made possible through the existence of multi-purpose survey datasets and this is the most notable value of secondary datasets in social research. However, besides this specific methodological contribution, secondary datasets also provide advantages in the broader academic sense.

3.2 Academic advantages of secondary analysis

Most prominent in the category of intellectual and academic advantages are those that relate to savings in terms of time and financial costs. However, in addition, the relatively low cost of secondary analysis studies also provide individual researchers the freedom to conduct their own independent social inquiry, mostly on their own terms without the limitations that are often attached in the funding of primary research.

Another advantage of secondary datasets is that those used are often of such an extended scope that any possible attempts to monopolise information by big research institutions or bureaucracies are almost impossible. In fact, this implies any individual researcher can have almost unlimited access to large datasets to investigate any topic of his/her choice at relatively low cost and without almost no bureaucratic obstacles to go through.

Of another importance to the academic society in general and social researchers in particular is the role that secondary analysis plays in facilitating the current trend towards specialisation in social research. This role is highlighted by Hakim (1982:15) where he maintains that, in a bid to ensure quality in social research, researchers should be allowed to specialise in different aspects of research like data collection and data analysis. In short he suggests that in certain circles of the research community, data collection and data analysis phases should be carried out by a different and separate group of data analysts. The common assumption behind this rhetoric is that the increased focus on one area of social research could improve the researcher's skills in that area.

3.3 General advantages of secondary analysis

Secondary analyses may also be advantageous to scholars in a more general sense. The convenient nature of secondary data may encourage research from which important political, cultural and ethical lessons can be derived. Boruch *et al.* (1981) provide one such example by referring to case study in the US where researchers Bowers and Pierce conducted a secondary analysis of an original study that was conducted in 1975 to assess the effects of capital punishment as a crime prevention strategy. Here, as in many other cases, secondary analysis was (and can still be) useful in generating knowledge or facts that challenged political decisions that were based on the (inaccurate) findings of the original study.

This particular case study illustrates that through secondary analysis of that study, Bowers and Pierce (in Boruch *et al.* 1981) was able to challenge the credibility of the original study. In short, their (secondary) analysis revealed that Ehrlich's study (original researcher) produced wrong conclusions about the positive effect of capital punishment on the reduction of crime levels in the US. Their secondary analysis

instead revealed that the original study's findings bore conclusions that were "untenable because his data and statistical procedures [were] inadequate... and that they (secondary analysts) instead introduced what they believed to be alternative or rival explanations for his conclusions. They offered alternative analyses, extensive discussion of the strengths and weaknesses of their interpretations, and drew upon other evidence in support of their conclusion" (Boruch *et al.*1981: 9). It could be argued therefore that without their secondary analysis, these flaws (in the design of the original study) would perhaps not have been noticed and addressed.

It may well be the case that such findings could even influence issues like political support or opposition to social issues like the controversial question of Capital Punishment (death sentence). This demonstrates that the role that secondary analysis can play in broader socio-political domain is enormous.

It is interesting to note that the facts and lessons from this (American) case study are in line with Hyman's (1972) argument that, in a strained atmosphere, political opponents sometimes use a survey as a political tool. It is possible that under such circumstances, secondary analysis may be the quickest and cheapest way to verify research conclusions, and thus its role in the development of politics can be valuable. In this case, however, the findings of secondary analysis served to undermine the cause of promoting the death penalty as a deterrent to crime in America, as had been ostensibly determined by the primary study.

Secondary analysis may also be regarded as advantageous to researchers in the sphere of ethics as it allows them to access and extract information from already existing datasets with almost no inconvenience to the members of the public. According to Dale *et al,* (1988:59) this means that secondary analysis can save the researcher the ethical problem of having to intrude into the private lives of respondents in a bid to obtain data. However, this advantage does not necessarily imply that secondary analysts are exempt from their duty to maintain high ethical standards.

The above section highlighted the various advantages that come with the different strengths and potential which are almost exclusive to the practice of secondary data analysis. It was shown how the progress of social science could be served through these advantages, particularly in terms of methodology, but also in the academic,

ethical and socio-political sense. It is against the background of these advantages that our next section shifts the focus to look at possible limitations or disadvantages that are associated with secondary data analysis.

3.4 Limitations and disadvantages of secondary analysis

Despite its enormous advantages, the analysis of secondary data also carries some limitations that make the primary studies preferable under certain circumstances. Most of these limitations are of a methodological nature and may pose threats or challenges to the validity of the findings. These range from indicators or error problems to technical problems relating to lack of skills, as well as other general problems. These challenges will be the specific focus of this section.

3.4.1 Validity problems

The key methodological problem with secondary analysis concerns the recurrent question of validity. The validity of the secondary analysis study is often threatened by problems with indicators, non-comparability of items or samples and certain 'distinctive' problems or errors. Some of the most common problems include the following:

3.4.1.1 Validity of indicators and concepts

The most commonly experienced problem with indicators in secondary analysis is that it is not always possible to find the ones that will adequately measure a certain concept that the analyst has in mind in the available data. Unlike the primary analyst who has the opportunity to precisely design the relevant indicators to measure the concept under study, the secondary analyst, in contrast, has to search among the available indicators for the ones that fit his concepts. The possibility of success in this regard is never certain.

Hyman also comments on this uncertainty. He argues for example, that the primary analyst might have designed questions that "may depart to some extent from what the secondary analyst has in mind. Sometimes the available indicators or questions may merely surround the target concept from various points, but none hitting it directly" (1972:30), a scenario that can be frustrating to an analyst about to begin a study. Put

differently, the lack of appropriate indicators to measure certain concepts is a common problem in secondary analysis.

The problem of lack of appropriate indicators as illustrated above often leads to the 'over-stretching' of the available questions. This often occurs when secondary analysts who, in desperation to find better indicators from within their available data, attempt to reshape the available questions in such a way that they assume a particular meaning, which they cannot carry. This condition then results in the 'slippage problem', which Hyman (1972:31) describes as an 'error' in measurement. Such errors may undermine the validity status of the study.

Equally true about the indicators problem is that an over-abundance of appropriate indicators, may also lead to an 'error'- in measurement problem. This means that if for example, there are too many indicators available in a dataset, it can be equally problematic for the secondary analyst to decide which ones to apply in his/her study. This then poses a challenge for the researchers concerned, particularly for those without adequate experience in secondary analysis. However, Hyman (1972:30) suggests that this problem of error in measurement resulting from the lack of or over-supply of indicators can be overcome by incorporating questions that tap important and forgotten aspects of the concept. Nevertheless, non-comparability of items and samples may also be a problem in the studies of comparative secondary analysis.

3.4.1.2 Non-Comparability Problems

The nature of the methodological problems in secondary research also depends to a large extent on the type of design adopted for the proposed study. In comparative study designs for example, the difference in purpose between the primary and the secondary research mean that the secondary analyst is likely to face problems of non-comparability in terms of items or samples used in different datasets.

According to Kiecolt *et al.*, the problem of item comparability occurs "when roughly comparable items have an unequal number of response categories" (1986:56). For example, in one dataset the concept to be measured may consist of four items while the other dataset displays five or six items. Under these circumstances, any attempts at comparing the two sets of data for the purpose of analysis may be futile. Similarly, there are also problems related to the non-comparability of samples, and non-

comparability of definitions. The former may arise due to differences in sample design adopted by the different surveys, as well as "...changes over time in methods of locating and selecting respondents [which] have resulted in changes in sample composition" (Kiecolt *et al.* 1986:63).

However, in the case of a comparative design, the non-comparability of definitions may arise due to the changes or differences in the way the target population is defined in each survey. Non-comparability problems such as these may make the data preparation and analysis difficult and may also compromise the validity of the study. Likewise, the definition of concepts, as in the case of the definition of what constitutes a household, may change over time as these instructions undergo changes in structure or purpose. Alternatively, this problem may stem from the fact that in a comparative study, the definition of key concepts is different. It thus becomes difficult to make a comparative analysis under such circumstances.

3.4.1.3 The 'entity' problem

Hakim (1982) observed that a secondary analyst is also likely to confront the difficulties of data integration, non-comparability and inflexibility of concepts, definitions and classifications, all of which are collectively termed the entity problem. The concepts and classification of the states, activities and processes that describe social units (entities that are contained in social data) "tend to become institutionalised, rigid and inflexible and are subject to reification bias" (Hakim, 1982:22). The problem highlighted here reflects the challenges that may confront a secondary analyst who aims to adopt certain types of designs for proposed studies - comparative designs. This implies that the study validity of comparative designs is more likely to be compromised than in a study where these limitations do not exist.

3.4.1.4 Distinctive problems of error in secondary analysis

Hyman (1972) maintains that one of the problems with analysing secondary data is that, unlike the primary analyst, the secondary analyst often has an incomplete knowledge of the exact way that the primary analysts operated in their sample. This lack of knowledge usually deprives the analyst of the basis from which to make sound appraisal of errors in the data used in secondary analysis. In practical terms, what may be a harmless or trivial source of error or even a desirable procedure when a survey is

applied to one purpose may become a source of considerable error when the same survey data is used for a different purpose.

A typical example of the above situation would be where the secondary analysis of data from an exploratory survey is re-analysed from an explanatory perspective and then produces errors. Under such circumstances, the design procedures used to address an exploratory topic (e.g. a survey of workers' training needs in a particular industry), may not be appropriate for addressing a topic that demands a more explanatory analysis. This view derives from the observations of scholars like Hyman, who argue that "the surveys appear to be most attractive properties to inherit and work with, and the analyst may therefore neglect to appraise how appropriate the procedures are for his topic" (1972:28).

Hyman (1972) illustrates this problem by referring to the secondary analysis of a dataset that was based on elegant probability samples but were restricted to the non-institutionalised population. Since some adults in retirement homes and students in tertiary institutions would have been excluded in the sampling, the subsequent secondary analysis of such data could under the circumstances constitute a minor constraint on the generalisability of the findings.

However, analysts who find themselves in scenarios similar to those mentioned above may be saved by the knowledge or awareness that problems of error in secondary data may be reduced if the analyst applies a criterion of quality in the selection and elimination of surveys at the point of design. Furthermore, such problems can be also be avoided if good judgement and special skill is exercised during the analysis stage, given the assumption that if high standard procedures are applied to good quality datasets, the possible impact of the limitations can be reduced.

3.4.2 Lack of relevant expertise

Like any other specialist areas in social research, such as Programme Evaluation, for example, a good secondary data analysis requires specialist skills too. This means that secondary datasets are normally made available as computer files, and in order to make sense of them one may require specialist knowledge or skill for a particular statistical package. For example, the October Household Survey datasets in South

Africa are made available in SPSS[5] format, and exploiting any knowledge from these resources requires some basic training in this software package.

However, the common view is that there are still relatively few researchers who are skilled in the latest software packages, like SPSS for example. Like Hinde, Hyman even argues that very little scientific knowledge has been extracted from existing datasets thus far, relative to the wealth of information they contain, the reason being that "many scholars are not skilled in the principles and procedures of secondary analysis of survey data"(1972:2). The apparent lack of skills and training or expertise in analysing secondary data thus limits the contribution that this type of research could make in the generation of scientific knowledge. Hyman (1972) thus cautions that this contribution will remain an unrealised goal until these deficiencies are remedied through special methodological training.

However Kiecolt *et al.* (1986) caution that, while the use or analyses of secondary data should be encouraged, too much reliance on secondary analysis could, in the end, retard the very course it is intended to serve. This implies that an increased preference of secondary analysis could possibly lead to the inhibition of creativity because, if the researchers use the same datasets repeatedly, they become limited by the variables contained in such datasets and these limitations would undermine proper analysis. Consequently, this factor could ultimately impact negatively on the progress of science and social research in general.

3.4.3 Problems of access and ethics

Access is yet another potential hazard for prospective secondary analyst. In this regard, Midcult *et al.* (1986) caution that despite the development of data archives, researchers sometimes have trouble locating what they need or experience long delays in acquiring datasets from archives. They maintain that this problem (of access) may even be exaggerated by other technicalities like the inadequate documentation of datasets, especially if small research firms with insufficient expertise of data storage produce such tapes.

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[5] Statistical Package for the Social Sciences (SPSS) – a Windows computer software application used in quantitative analysis of (survey) data.

With regard to research ethics, however, it is more likely that the secondary analyst may be ignorant of or insensitive to the interests of the research subjects that were agreed on initially, during the primary data collection (e.g. contracts, commitments regarding the intended use of study findings and assurances of confidentiality etc.). This implies that it is possible for the original commitments and agreements covering the use of data to be violated by the secondary analyst who may not consider himself bound by the undertakings of the primary analyst(s). As Hinder *et al.* explain, "it is easy for the secondary analyst to be completely unaware of the issues that so concern field researchers" (1988:59). Such issues may include the contracts and promises that are made between the researcher and the research subjects.

This section reviewed some of the most notable limitations associated with secondary data analysis. These limitations normally manifest themselves at different levels: at one level they present as methodological problems that relate to various issues like selection of indicators, non-comparability of items and sample, and problems of error that are distinctive of secondary analysis. It was stressed that these problems, if not addressed in advance, may pose serious validity problems to the proposed analysis.

3.5 Concluding summary on secondary data

3.5.1 In summary

In the last section, different definitions of secondary data analysis were covered. These definitions varied from those that are very specific, as highlighted in Hakim (1982), to those that are more general, like those suggested by Hyman (1972). It appears from available literature that secondary data analysis may vary in form from a mere review or replication of original analyses to the further analyses of existing datasets that present interpretations, conclusions or knowledge additional to, or different from those in the original study report. However, Dale *et al.* (1988) suggested that, although it was neither practicable nor necessary to attempt to construct a watertight definition of secondary analysis, it could still be typified, given that secondary analysis is growing steadily as a specialist area of social research.

Also discussed were some of the main reasons why the practice of secondary analysis should be encouraged in social research. Central to the rationale for secondary analysis, therefore, was the argument that the existing multi-purpose datasets contain a wealth of information that is under-utilised mainly due to lack of exposure to secondary data analysis or poor levels of expertise among the potential analysts. Therefore the rationale for more regular use of secondary analysis is that it will improve the level of (secondary and general) data analysis skills of researchers and students.

In this section I also advanced arguments to the effect that secondary analysis could promote and facilitate better use of the public funds that are spent when large multi-purpose national surveys are conducted, particularly those that are designed with secondary analysis in mind, like the General Household Survey or the South African version, the October Household Survey. This implies that secondary analysis may facilitate a more efficient use of the funding of surveys because the same data may be exploited to cover a wide range of topics including health, housing demographic patterns, politics and economics, to mention but a few.

I also briefly mentioned how secondary analysis has proved to be effective in improving the quality of Programme Evaluation research. Reference was made to the secondary analysis study that was conducted by Bowers and Pierce in 1981 to challenge the findings and conclusions of the primary analyst, Ehrlich. This was a typical case where secondary analysis was useful in detecting the methodological flaws in the data inherited from the original study and as a result, the validity of the findings could thus be challenged. Considering that this was attained at a minimal cost of time and money, the regular use of secondary analysis for Programme Evaluation purposes was encouraged.

Also emphasised was the flexibility of secondary analysis. It was described as a flexible approach to social inquiry that could involve many dimensions. This implied that secondary analyses could be designed to achieve various objectives. It could be more general, as in re-analysing the same data with a new objective in mind, or more specific in orientation, as in confirmatory or complementary analyses of the same topic as the primary (original) study. These different perspectives demonstrated the

roles of secondary analysis could play in improving, *inter alia*, on methodological and substantive (topic) theoretical literature.

Another main focus of this chapter was on the methodological, academic and other general advantages and the limitations associated with secondary analysis. Among many general benefits that secondary analysis offers, the savings in terms of time and money, possibilities of skill enhancement and the unique potential of large datasets were cited as the most distinct advantages. In terms of methodology, secondary analysis was shown to offer high data quality and the potential of allowing for the design of a large variety of studies.

However, these discussions also acknowledged the disadvantages and limitations of secondary analysis, the most notable of these being the apparent lack of available expertise to conduct secondary analysis and the consequent under-utilisation of existing datasets. However, there are concerns, as well, that the excessive reliance on secondary data may limit the scope of social research as there could be excessive concentration on areas of inquiry that have already been covered in the datasets. Nevertheless, there is growing consensus that the advantages and potentials that secondary analysis offers clearly outweigh its disadvantages Babbie, 1989).

The central opinion in the literature covered thus far is that, despite the identified and potential problems and limitations of secondary data, their effect is marginal when compared to its benefits. In support of this opinion Stewart (1993) even suggests that these problems or limitations could be overcome by implementing a number of measures like the introduction of multi-purpose surveys, or experience gained through the regular use of secondary data. Perhaps even more directly, the specialist training in the skills of secondary analysis could be of much help in this regard.

3.5.2 The theoretical relevance of literature to the proposed study

The dynamics, nature and scope of secondary analysis discussed in this chapter relate to the proposed study (i.e. "The use of secondary data in the study of living arrangements in S.A") in a number of ways. Firstly, the use of large multi-purpose datasets like the October Household Survey (OHS) as proposed in this study, was in line with the challenge to make more efficient use of existing datasets that are currently under-utilised. Secondly, this undertaking was viewed as a learning

experience, which means that in the course of such analyses, the analyst anticipated that he would personally benefit from doing secondary analysis. In addition, a contribution to theory and policy development could be made for both terms of the substantive topic (i.e. living arrangements of households and the methodology of secondary analysis respectively).

On the whole, the analyst anticipated that the methodological complexities of secondary data analysis that were highlighted in this chapter would offer well-deserved opportunities and challenges during the course of the (data) analysis in particular in the proposed study. Possible challenges ranged from difficulties in searching for the appropriate indicators to adequately embracing the desired concepts for the new analysis. In this case, for example, the challenge would probably lie with task of searching for the most appropriate indicators for concepts in the proposed topic like 'living arrangements' or 'material bases' to mention but a few.

Conversely, there were also opportunities to look forward to in this project. The first of these was the availability of massive information that could be extracted to suit the objectives. In addition, the abundance of data and sophisticated statistical software facilities like SPSS would hopefully enhance the analysts' ability and choice in redesigning the proposed study according to the commands of developments during the course of the study. For example, the study could be designed to be exploratory, explanatory or simply complementary as future circumstances may allow or demand. However, the benefit I expected from this study was also to gain valuable data analysis skills.

Against the background of the discussions in these chapters, I decided that secondary data analysis of the proposed dataset (October Household Survey-96) for the proposed study was more relevant than ever.

CHAPTER 4:RESEARCH METHODS AND SAMPLING

4.1 Research methods

4.1.1 Research design

This study is based on secondary data, i.e. it is a secondary data analysis. As a researcher, I had to select the variables that were potential indicators for the study. These included:

1. **INCOME (of the household head):** Refers to the total amount of economic value that is generated by people's earnings through various sources like wages; grants; pensions and salaries mostly on weekly or monthly basis.
2. **TYPE OF DWELLING:** Refers to differences in the level of quality of the housing structures in which the household lives. Formal dwellings are presumed to of higher quality by virtue of being made of quality material like bricks and cement, which informal dwellings are often made of inferior materials, like shacks for example.
3. **DWELLING OWNERSHIP:** Refers to the ownership status of the dwellings in which the household lives. It can either be owned or merely rented by the occupants concerned.
4. **HOUSEHOLD SIZE (members):** Refers in this case to the total number of adults and minors of 16 years of age or older that reside in same dwelling.
5. **MAGISTERIAL LOCATION/DISTRICT:** Refers the number of neighbouring areas that fall under the jurisdiction of the same magistracy. These can either be located closer to the big cities (i.e. Metropolitan districts), or far from big cities (i.e. Non Metropolitan districts).
6. **POPULATION GROUP/RACE:** Refers to the racial classification of citizens according to their colour, language and culture. Four such categories are Blacks (i.e. Africans); Whites; Indians and Coloureds.

4.1.2 Data collection

4.1.2.1 The questionnaire

According to the report (OHS-1996) data collection instrument - a questionnaire - for the 1996 OHS contained questions about the household as whole, as well as individual members. In the household section, questions were asked, for example, about type of dwelling (or dwellings) in which they live, access to facilities such as electricity, tap water, toilets and regular refuse removals; access to health and social welfare services; and the safety and wellbeing of the household.

In the section completed for each individual of the household, questions were asked about age, gender, education, marital status, migration, use of health services, economic activity, unemployment, employment and self-employment.

4.1.2.2 The field work

Information was collected in face-to-face interviews in the households sampled throughout the country. (The Western Cape sample constituted a total of 1376 households.) During these interviews, fieldworkers administered the questionnaire to a responsible person in each household.

4.1.3 Data analysis, presentation and report writing

The OHS 1996 data that were made available for report writing came as a series of tables and cross-tables. However as indicated previously, my analysis of data is limited to the head of the household as the head of household's data is normally used for the household as a whole, according to the OHS 1996 report.

4.2 Sample profile

4.2.1 Background to the OHS

The October Household Survey (OHS)[1] is an annual sample survey that was undertaken for the first time in 1993 by the former Central Statistical Services (CSS),

(now called Statistics South Africa/SSA) which is based in Pretoria. It was a government initiative aimed at providing information that will help to improve the quality of life of all South Africans.

The OHS programme is able to provide detailed information about living conditions and life circumstances of all South Africans in general. Such information covers various aspects like socio-biographic information; particular of services available in the dwelling, their perceived quality of life and RDP related information on employment, and information about both the informal and formal sectors.

4.2.2 Sample design (of OHS 1996)

The preliminary database of enumeration areas (EAs), as established during the demarcation phase of Census '96, constituted the sampling frame for selecting EAs for the OHS 1996. According to the OHS report, this arrangement was used to save transport, field worker and other costs.

The sampling procedure involved stratification by province and EA type (formal and informal urban areas, commercial farms, traditional tribal lands and other non-urban areas). Independent, systematic samples of EAs were drawn for each stratum within each province. Within each of these EAs, systematic sampling was applied to select 10 households to visit. Altogether, 800 EAs were drawn.

4.2.3 Weighting the Sample

According to the OHS report, data on individuals within households were weighted by age, race and gender, according to CSS population estimates of the population living in urban and non-urban areas in the nine provinces. Data concerning households were weighted by the estimated number of households in the country in various provinces, according to the proportions found in urban and non-urban areas, and by the population group of the head of the household. These data were first weighted on individuals, and then the weight assigned to the head of the household was used as the weight of the household. However in my study, data analysis was limited to that of the household (as represented by the head of the household).

4.3 Data description

4.3.1 Data summary:

- Dataset: 1996 version of the OHS. Type of data: structured survey
- Method of data collection: survey questionnaire
- Data collectors: trained field workers
- Units of observation: households
- Sample size: (Western Cape region) 1376 cases

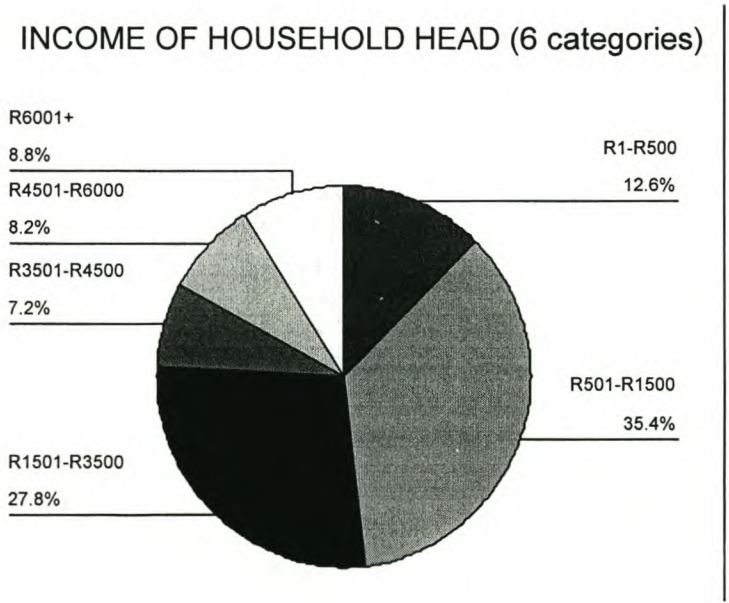
4.3.2 Distribution of Variables

In this section the distributions of the five important variables in this study are presented:

INCOME

The chart below shows the distribution of incomes in the Western Cape region. It indicates that this distribution is as follows (monthly income figures):
12% fall within the lowest-income bracket (R1-R500); 35.4% fall within the second-lowest-income bracket (R501- R1 500); 27.8% within the lower middle-income bracket (R1 501-R3 500); 7.2% within the higher-middle-income bracket (R3 501-R4500); 8.2% fall within second-highest income bracket (R4 501-R6000) and 8.8% fall within the highest-income bracket (R6001+). This means that the majority (75.2%) of households fall in the low and lower middle-income bracket (R500-R3500).

Figure 4.1 INCOME



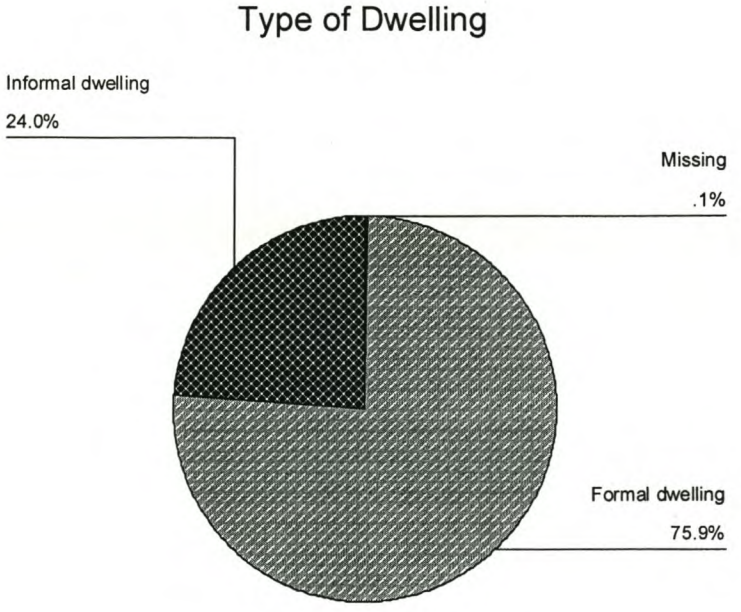
(N=794)

N.B: The above chart displays the income distribution according to six categories. This arrangement gives a better picture of this distribution. However, for the sake of simplicity, only four main categories will be used during data analysis (Chapter 5).

TYPE OF DWELLING

The chart below shows that majority of dwellings (more than two-thirds) in the sample are of formal types: of a total of 1396 households in the sample, 75.9% live in formal dwellings while only few (24.0%) of these households live in informal dwellings. It follows therefore that great majority of the households in the sample are better off in terms of accommodation or housing facilities.

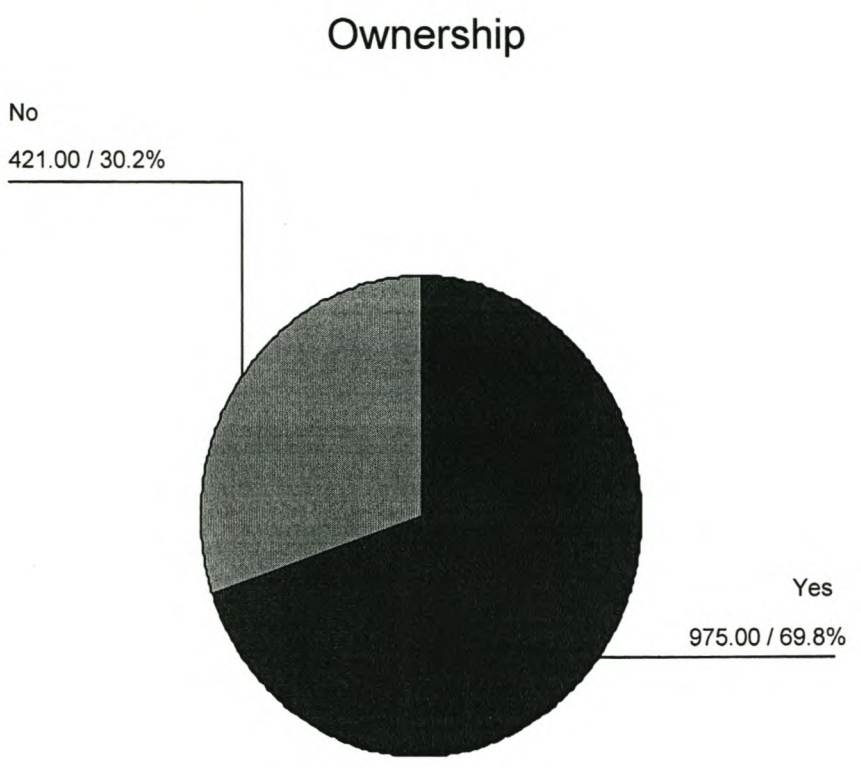
Figure 4.2 TYPE OF DWELLING



(N=1395.9)

N.B: In this context, the dwelling refers to the house in which the household head and the rest of the family are living in currently.

Figure 4.3 DWELLING OWNERSHIP

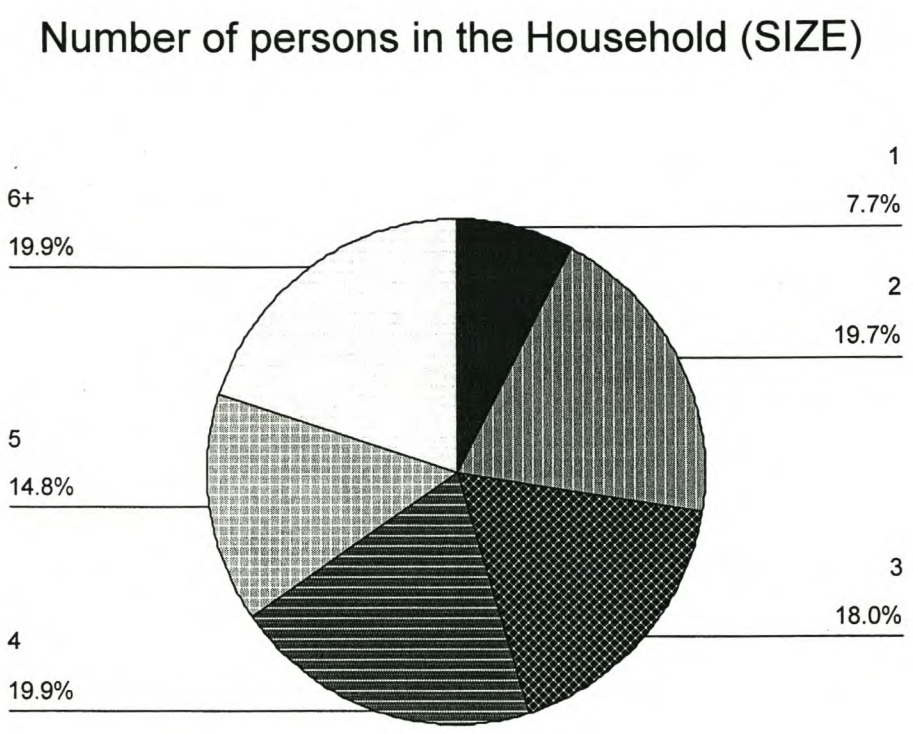


(N 1396)

It is of interest to notice that the majority (over two-thirds) of household dwellings in the sample are owned (69.8%). This implies that the majority of respondents are better off in terms of house ownership. Only about a third (30.2%) of these dwellings are not owned by their occupants (i.e. they are rented). However, the ownership percentages include the informal dwellings as well, which means that if these are excluded, the actual percentage of owned proper dwellings may be lower than are currently projected.

N.B: This charts refers to the ownership of dwellings in which the household head (and the rest of the household) is currently living in and not about the ownership of any other dwellings apart of this one).

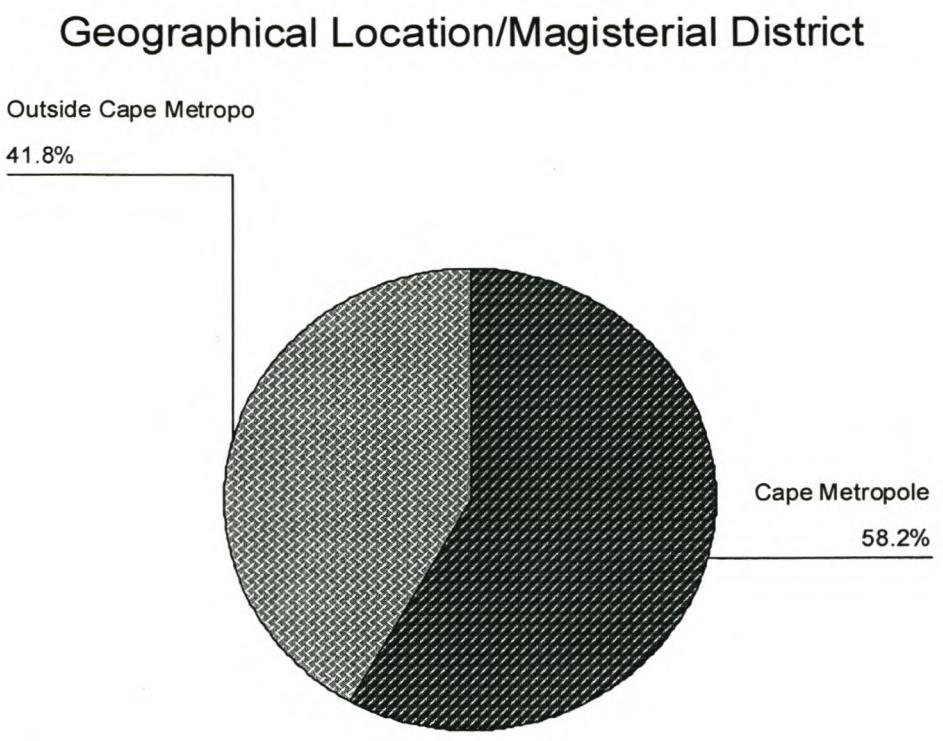
Figure 4.4 HOUSEHOLD SIZE



(N=1396)

A look at the household size distribution chart indicates that the 1396 households in the sample the sizes are distributed as follows: 7.7% are 1-member households, 19.7% have 2 members, while 18.0% are 3-member households. 19.9% have 4 members, 14.8% have 5 members, and the remaining 19.9% have 6 or more members. In general terms, this result represents an even distribution of household sizes (1-6+member) in the sample where no single household size is significantly dominant compared with the rest.

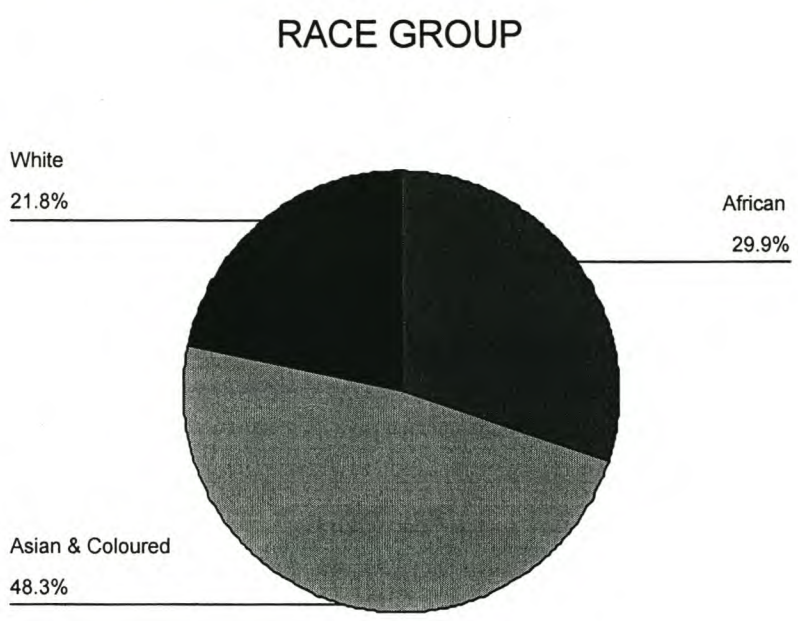
Figure 4.5 MAGISTERIAL DISTRICT



(N=1396)

According to the chart, the distribution of households in the sample is skewed towards the (Cape) metropolis districts. This means that a slight majority (58.2%) of the sample total of 1396 households reside in urban or metropolitan areas. The rest of the households (41.8%) live mainly in smaller towns outside of the Cape metropolis/non-metropolitan districts and the rest live in rural areas.

Figure 4.6 RACE/POPULATION GROUP



(N=1396)

According to the chart above the race distribution in the sample shows that the Coloureds (and Asian) constitute the majority population group in the Western Cape: Almost half of the respondents (i.e. household heads) in our sample are Coloureds, whose proportion in the sample is 48.3%. Africans and Whites follow them at the proportions of 29.9% and 21.8% respectively.

The sample proportions are similar or at least in line with the census data of the same year (i.e. Census: 1996). Apparently, there appear to be slight differences between the two datasets since the Census data have unlike that of the OHS, recorded the sample distributions with different proportions: 55.2% for Coloureds; 20.9% for Africans and 20.8% for Whites. (See. Annexure B). This situation suggests a slight skewed ness in what appear to be an under representation of Coloureds and overrepresentation of Africans in our (OHS) dataset. Nevertheless, the two datasets still confirm that Coloureds constitutes a considerable proportion of the sample population, and are followed by Africans and Whites, whose population proportions are almost equally distributed within the remainder of the sample population. This fact therefore serves to reassure us of the overall representative ness of our sample data in respect to this variable.

5. CHAPTER 5 FINDINGS

5.1 Introduction

It was hypothesised at the beginning of this study that a relationship exists between income, as a variable or indicator of the economic profile of households, and other variables that reflect the socio-economic profile of households, i.e. patterns in living arrangements. These included dwelling type, dwelling ownership and household membership size. However, It was further hypothesised that the relationship between income and each of these variables would be closely associated with the magisterial district and the race (of the household heads) respectively. My findings are thus presented against this background.

5.1.1 Hypothesis 1 INCOME and TYPE OF DWELLING (accommodation)

The results in Table 1 indicate that, as expected, there is a moderately strong relationship between income and type of dwelling: (Cramer's V/r = 0.286). This relationship is also statistically significant (Chi-square 64.828; $p<0.000$). Therefore, the data support the hypothesis that there is a relationship between income and type of dwelling (H.1).

TABLE 1

income of employee * type of dwelling (recoded) Crosstabulation

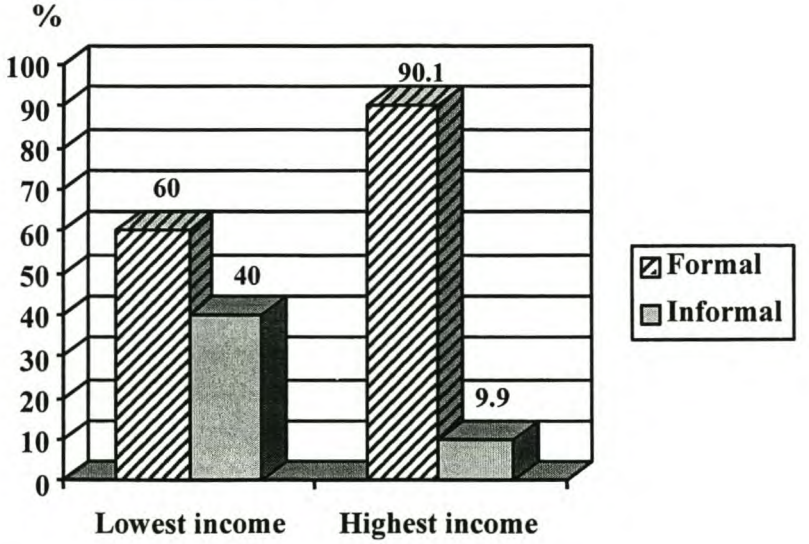
			type of dwelling (recoded)		
			Formal dwelling	Informal dwelling	Total
income of employee	R1 - R500	Count	60	40	100
		% within income of employee	60.0%	40.0%	100.0%
		% within type of dwelling (recoded)	9.9%	21.2%	12.6%
	R501 - R1 500	Count	182	98	280
		% within income of employee	65.0%	35.0%	100.0%
		% within type of dwelling (recoded)	30.1%	51.9%	35.3%
	R1 501 - R3 500	Count	189	32	221
		% within income of employee	85.5%	14.5%	100.0%
		% within type of dwelling (recoded)	31.3%	16.9%	27.9%
	R3 501 +	Count	173	19	192
		% within income of employee	90.1%	9.9%	100.0%
		% within type of dwelling (recoded)	28.6%	10.1%	24.2%
Total		Count	604	189	793
		% within income of employee	76.2%	23.8%	100.0%
		% within type of dwelling (recoded)	100.0%	100.0%	100.0%

The support for the first hypothesis (H.1) is derived from the fact that, as predicted, there is a strong correlation between the high-income bracket and formal dwellings. This is based on the fact that according to the results, the proportion of formal dwellings in the high-income bracket (R3 501+) is higher (90.1%) than the overall percentage of formal dwellings in the total sample (76.2%). However, the proportion of low-income (R1-R500) and formal dwellings is lower (60%) than their overall percentage (76.2%).

Conversely, the proportion of formal dwellings in the low-income bracket (R1 500) is the highest (40%) - almost twice the overall proportion (23.8%) of informal dwellings in the total sample. In contrast, the proportion of high-income bracket (R3 501+) and informal dwellings is lower (9.9%) than the overall percentage of informal dwellings (23.8%) in the total sample.

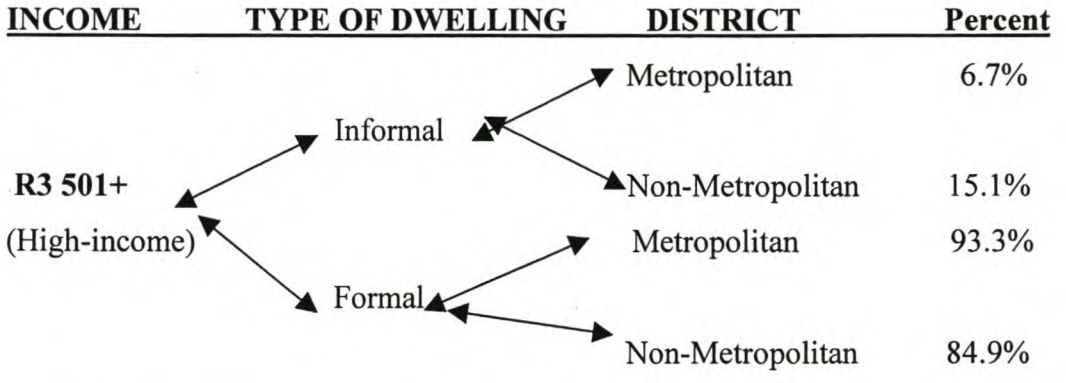
It follows from the above results that a relationship exists between income and household dwelling type. As hypothesised, this relationship reflects a pattern whereby high-income households correlate more strongly with formal dwellings and conversely, low-income households correlate more strongly with informal dwellings. For these households then, it means that a high-income level correlates with the high probability of living in a formal dwelling while conversely, a low-income level correlates with a high probability of living in an informal dwelling. The results presented in Table 1 may also be schematically represented as follows:

Figure 2 Income by Type of Dwelling



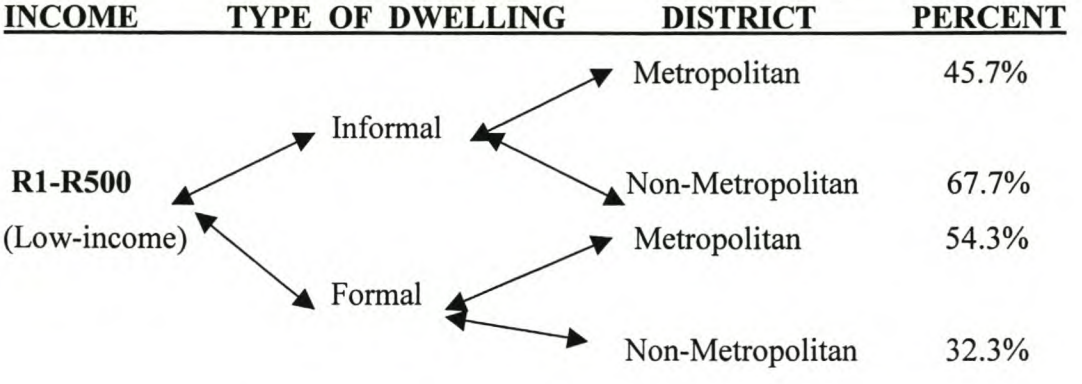
However, once the variable of *magisterial district* is controlled for in the above relationship (*income* and *type of dwelling*), some changes appear (which are in line with the predictions of Hypothesis 1). The effect of *district* in this relationship reveals that in general, the proportion of both the high-income and formal dwellings is relatively higher in the metropolitan districts (93.3%) than it is in the non-metropolitan districts (84.9%). However, in both instances, these proportions are higher than the overall proportion of formal dwellings in the sample (76.2%). The effect of *district* in this relationship can be schematically represented as follows:

Fig.5.1:



Likewise, the proportions of both the low-income households and informal dwellings is, (as was predicted) higher (67.7%) in the non-metropolitan districts than in the metropolitan districts (45.7%). Schematically, these results look this:

Fig.5.2:



However, contrary to my expectations, the results further indicate that controlling for the variable *district* in this relationship reveals unexpected outcomes: the proportion of low-income (R1-500) households that live in formal dwellings is surprisingly higher (67.7%) in the non-metropolitan districts than it is in the metropolis (45.7%). It appears therefore that in terms of dwellings, people in the non-metropolitan areas are

better off than their counterparts in the metropolis as they have a higher proportion of formal dwellings. However, as predicted, the higher proportion (93.3%) of high-income (R3 501+) households in the metropolitan districts that live in formal dwellings means that they are in a better position in terms of accommodation than their counterparts in the non-metropolitan districts (84. 9%).

In summary therefore, the effect of controlling for (magisterial) *district* in the relationship between *income* and *type of dwelling* unexpectedly and surprisingly indicates that there is a higher proportion of formal dwellings among non-metropolitan low-income households (R1-R500) than among their metropolitan counterparts. However, this surprising outcome does not apply to high-income (R3 501+) households, where the proportion of formal dwellings is (as expected) higher amongst metropolitan households than their non-metropolitan counterparts.

The relationship in question (between *income* and *type of dwelling*) is both moderately strong (Cramer's V/r = 0.455) and statistically significant (Chi-Square 90.530; $p<0.000$) among the metropolitan households. However in the case of non-metropolitan districts, this relationship is moderately weak (Cramer's V/r = 0.172), and statistically not significant at the 1% level (Chi-Square 10.498; $p<0.015$).

With regard to the effect of the variable *race*, the data shows that when population group/race is controlled for in the relationship between *income* and *type of dwelling*, the data reveal disparities between different race groups. For example, amongst the high-income (R3 501+) households, whites have the highest proportion of formal dwellings (100%), while their Coloured and Africans counterparts have relatively lower proportions of formal dwellings.

Conversely, the distribution of informal dwellings within this (high-income) bracket reveals, surprisingly, that there is a significantly high percentage (45,9%) of Africans who are high-income earners who live in informal dwellings. Arguably, this proportion is the highest when compared with the corresponding result in the Coloured (2.1%) and Whites (0%) groups, where such a situation is almost non-existent.

Likewise, among low-income earners (R1-R500), the proportion of formal dwellings is the highest (100%) among the white households, high among the Asian/Coloured (94.9%), but drops to a low level in the African group (20.8%). Similarly, the proportion of informal dwellings among the low-income earners is highest amongst Africans (79.2%), lowest amongst Asian/Coloureds (5.1%) and non-existent amongst Whites (0%). A schematic representation of these results is presented below:

Fig.5.3:

INCOME	TYPE OF DWELLING	DISTRICT	PERCENT
R1-R500 (Low-income)	Informal	African	79.2%
		Asian/Coloured	5.1%
		White	0%
	Formal	African	20.8%
		Asian/Coloured	94.9%
		Whites	100%
R3 501+ (High-income)	Informal	African	45.9%
		Asian/Coloured	2.1%
		Whites	0%
	Formal	African	54.1%
		Asian/Coloured	97.9%
		Whites	100%

In summary, the results indicate that *race* has an effect on the relationship between *income* and *dwelling type* and this effect is in accordance with our hypothesis: The results show that Whites have the highest proportion of formal dwellings, and the Asian/Coloureds group the next highest, while amongst Africans this proportion is the lowest. This situation applies both to low-income and high-income brackets households. Conversely, Africans have the highest proportion of informal households in both income brackets but particularly amongst low-income earners.

According to these statistics, this relationship is moderately strong (Cramer's V/r = 0.334) and statistically significant (Chi-Square 27.778; $p<0.000$) amongst Africans; weak (Cramer's V/r = 0.144); and not significant amongst Coloureds (Chi-Square

7.768; p>0.051). Among Whites, this relationship is moderately weak (Cramer's V/r = 0.202) and statistically not significant (Chi-Square 6.829; p>0.078).

5.1.2 Hypothesis 2: INCOME and DWELLING OWNERSHIP (Assets)

According to the results in Table 2, there is a poor relationship between *income* and *dwelling ownership* (Cramer's V/r = 0.094). This relationship is also not statistically significant (Chi-square 7.001; p>0.072). In general, the data support the hypothesis that there is a relationship, in the expected direction, between *income* and *dwelling ownership*.

TABLE 2

income of employee * ownership Crosstabulation

			ownership		
			Yes	No	Total
income of employee	R1 - R500	Count	63	37	100
		% within income of employee	63.0%	37.0%	100.0%
		% within ownership	11.4%	15.4%	12.6%
		% of Total	7.9%	4.7%	12.6%
	R501 - R1 500	Count	194	87	281
		% within income of employee	69.0%	31.0%	100.0%
		% within ownership	35.1%	36.1%	35.4%
		% of Total	24.4%	11.0%	35.4%
	R1 501 - R3 500	Count	149	72	221
		% within income of employee	67.4%	32.6%	100.0%
		% within ownership	26.9%	29.9%	27.8%
		% of Total	18.8%	9.1%	27.8%
	R3 501 +	Count	147	45	192
		% within income of employee	76.6%	23.4%	100.0%
		% within ownership	26.6%	18.7%	24.2%
		% of Total	18.5%	5.7%	24.2%
Total		Count	553	241	794
		% within income of employee	69.6%	30.4%	100.0%
		% within ownership	100.0%	100.0%	100.0%
		% of Total	69.6%	30.4%	100.0%

The data also reveal a pattern that is consistent with Hypothesis (2). For example, the data indicate within the lowest income bracket (R1-R500), that the proportion of owned dwellings is high (63.0%), but still lower than the overall proportion of owned dwellings in the sample (69.6%).

Conversely, among the highest-income (R3 501+) households, the proportion of owned dwellings is higher (76.6%) than the overall proportion (69.6%) of owned dwellings in the entire sample (794). It follows therefore that as hypothesised, the

high-income households are likely to correlate more strongly with a high score on *dwelling ownership*. Although not significant, these results are consistent with the predictions of our hypothesis about the relationship between *income* and *dwelling ownership*. Schematically, these results can be represented as follows:

Fig. 5.4:

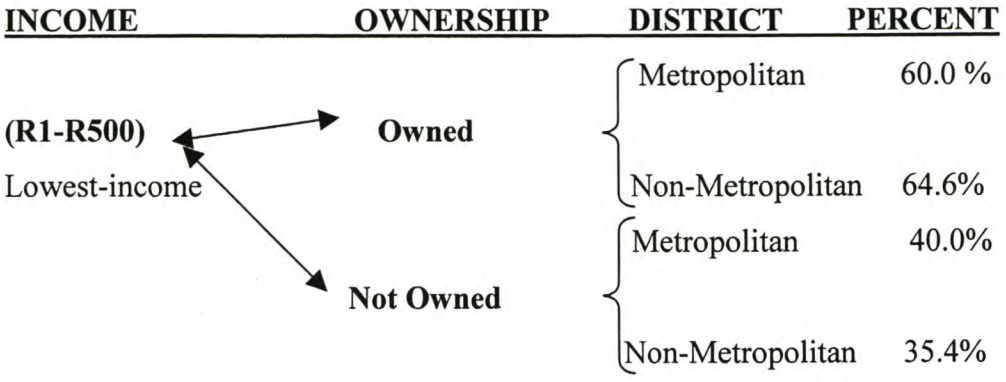
INCOME	OWNERSHIP STATUS	PERCENT
(R1-R500) Lowest-income	Owned	63.0%
	Not-Owned	37.0%
(R3 501+) Highest-income	Owned	76.6%
	Not-owned	23.4%

(N=292) **N.B**: (N= only covers lowest (n=100) and highest (192) income categories)

When the variable *district* is controlled for in this relationship, some immediate differences are observable. For example, within the lowest-income bracket (R1-R500), the proportion of owned dwellings is surprisingly higher (64.6%) in the non-metropolitan than in the metropolitan districts (60%). This implies that in terms of house ownership, lowest-income earners who live in non-metropolitan areas are better off than their counterparts in the metropolitan areas.

The above outcome, however, is contrary to the logic of the hypothesis whereby the opposite situation was anticipated: i.e. the outcome challenges the common thinking that across the income board, metropolitan households will show the higher proportion of dwelling ownership compared to their non-metropolitan counterparts. This situation could, *inter alia*, be attributed to the presumably high proportion of rented accommodation (e.g. local municipality flats) in the big cities than outside of big cities. These outcomes are schematically represented as follows:

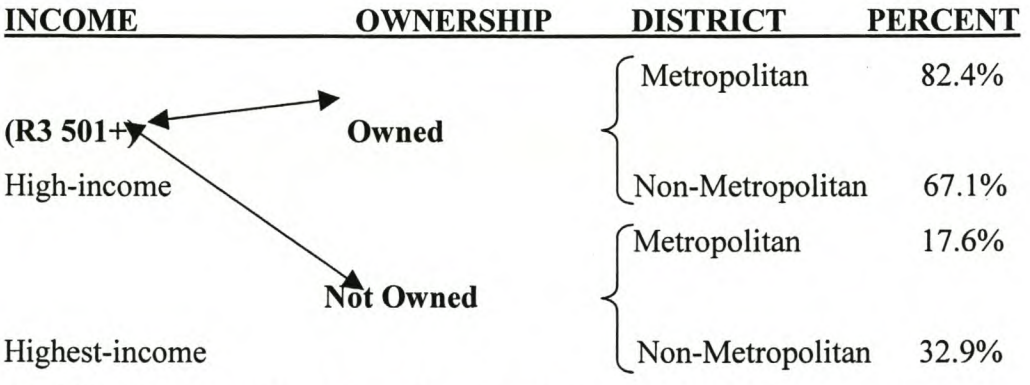
Fig. 5.5:



(N=292) **N.B**: (the total only covers lowest (n=100) and highest (192) income categories)

However, unlike those in the low-income bracket, the metropolitan high-income households (R3 501+) have a higher proportion (82.4%) of dwelling ownership than their non-metropolitan counterparts (67.1%). This outcome is in line with my predictions, as I expected a strong correlation between high-income and high proportion of dwelling ownership. The schematic representation of these results is presented below:

Fig. 5.6:



(N=292) **N.B**: (the total only covers lowest (n=100) and highest (192) income categories)

The statistics reveal that these relationships are moderately weak (Cramer's V/r = 0.165) but statistically significant (Chi-square: 11.955; $p<0.008$) among the metropolitan households. In case of non-metropolitan households, there is a weak relationship (Cramer's V/r = 0.066) and not statistically significant (Chi-square: 1.538; $p>0.674$).

In summary, the patterns in the above results show that the variable *district* has an effect on the relationship between *income* and *dwelling ownership* and this relationship is in the predicted direction, and this can be seen in the case of high-income households. The exception evident in the case of low-income households can be explained mainly in terms of the comparatively higher incidence of rented flats or houses in the metropolitan areas than in the non-metropolitan areas. This situation, arguably, accounts for lower levels of *dwelling ownership* in the metropolitan than in non-metropolitan districts.

As in the case of the variable *district*, controlling for the variable *race* also appears to have an effect on the relationship between *income* and *dwelling ownership*. The results show differences across the different population/racial groups in this relationship. Amongst low-income households (R1-R500), Africans have the highest proportion of owned dwellings (77.1%); the Coloured group follows them with a proportion of 53.8% and Whites have the lowest proportion (38.5%). Again, this outcome is surprising as it goes against the logic of Hypothesis (2) whereby Whites, and not Africans, are expected to show the highest proportions in terms of ownership, then followed by Coloureds, while Africans are expected to show the lowest proportion in respect to this commodity. However, the results show a reverse trend.

Various factors could explain the above outcome or situation. For example, among whites, it is conceivable that these low-income earners (R1-R500) are mostly pensioners who probably live in rented rooms in retirement villages or other buildings and therefore do not own their dwellings. Historically, these facilities have not existed in the Coloured or African communities. Instead, the trend in these communities is usually that a high incidence of old-age pensioners (most of whom fall within to the R1-R500) who live in their own houses probably live there together with their dependent adult children and/or grand children. These factors therefore could account for the relatively higher levels of dwelling ownership amongst these communities (African and Coloured).

Likewise, among the high-income households (R3 501+), Africans still have the highest proportion (86.5%) of owned dwellings, more than their Coloured (69.1%) and White (82.0%) counterparts. This finding is also unexpected in terms of the logic

of my Hypothesis (2), whereby Whites were expected to lead in terms of dwelling ownership, followed by Coloureds and then by Africans.

One of the reasons that could account for this surprisingly high statistic is the fact that this very category has been recorded as having the highest proportion (45.9% vs. 2.1% & 0.00%) of high-income households that still occupy informal dwellings, as compared with their Coloured and White counterparts. As a result therefore, this could reflect high levels of ownership in general.

In the case of Coloureds, a possible reason for their relatively lower (than Africans) proportion of dwelling ownership could be that, unlike their African counterparts, they have lower levels of high-income people that (still) live in informal dwellings, which would otherwise reflect higher ownership levels. Secondly, it is also plausible that in this community, a significant proportion of high-income earners are still waiting for suitable, affordable dwellings to be constructed or they may simply prefer to rent their dwellings.

Among the Whites the relatively lower proportion of home owners (only less than 5% that of Africans, though) could be explained in terms the socio-economic dynamics in this community. For example, it is possible that Whites in the high-income bracket are proportionally more skilled or have more marketable skills than their counterparts in the Coloured and African communities. This would mean that there could be a higher demand for their skills, which would accelerate the prospect of relocation with better job offers. The research done by Bhorat (2000) showed that this category of (White) workers would probably either be intellectuals and other workers skilled in rare but highly demanded areas such as Engineering, Medicine and Information Technology (IT). This is quite plausible as there are more highly skilled workers in the White community than in any other in South Africa. Therefore the prospect of constant moving due to periods of specific contract work, as well as the prospect of the offer of company-owned accommodation and other such benefits could all contribute to the lack of interest in owning houses/dwellings in this group.

According to the statistics, these relationships are weak (Cramer's V/r = 0.101) and statistically not significant (Chi-square: 2.551; p> 0.466) among Africans and weak

(Cramer's V/r = 0.089) and statistically not significant (Chi-square: 2.957; p> 0.398) among Asian Coloureds. However, among Whites, these relationships are both moderate (Cramer's V/r = 0.314) and statistically significant (Chi-square: 16.632; p> 0.001).

In summary: the results above indicate that in general, the data shows an overall consistence the Hypothesis (2) - the relationship between *income* and *dwelling ownership*. However, this relationship is neither strong nor statistically significant. The variable *district* has also been shown to influence this relationship in general, while conversely, the variable *race* was shown to have an unanticipated effect on the relationship, contrary to the logic of the hypothesis.

5.1.3 Hypothesis 3: INCOME and HOUSEHOLD SIZE (member composition)

An examination of the results in Table 3 indicates that out of the total sample of 794 households, 100 (12.6%) fall within the lowest-income bracket (R1-500), while 192 (24.2%) fall within the highest-income bracket (R3 501). This outcome implies that a weak relationship exists between *income* and *household size* (Cramer's V /r = 0.171). This relationship is not statistically significant (Chi-Square 23.342; p<0.077), and therefore does not support Hypothesis 3.

The apparent lack of support for this hypothesis stems from the fact that the data does not indicate the existence of any clear pattern between *income* and *household size* as predicted. Instead, there is a similar percentage distribution of both smaller and larger households within the lowest-income (R1-R500) group. These distributions according to Table 3 recorded as: 11.9%-12.7%-16.0% for small size households and 7.1%-16.8%-12.3% for large households. These results however go against the grain of modernist wisdom about household size, which generally holds that a high income encourages smaller or nuclear size households.

Table 3

number of persons in the household (recoded) * income of employee Crosstabulation

			income of employee				
			R1 - R500	R501 - R1 500	R1 501 - R3 500	R3 501 +	Total
number of persons in the household (recoded)	1	Count	8	32	16	11	67
		Expected Count	8.4	23.7	18.6	16.2	67.0
		% within number of persons in the household (recoded)	11.9%	47.8%	23.9%	16.4%	100.0%
		% within income of employee	8.0%	11.4%	7.2%	5.7%	8.4%
	2	Count	20	59	33	46	158
		Expected Count	19.9	55.9	44.0	38.2	158.0
		% within number of persons in the household (recoded)	12.7%	37.3%	20.9%	29.1%	100.0%
		% within income of employee	20.0%	21.0%	14.9%	24.0%	19.9%
	3	Count	23	44	43	34	144
		Expected Count	18.1	51.0	40.1	34.8	144.0
		% within number of persons in the household (recoded)	16.0%	30.6%	29.9%	23.6%	100.0%
		% within income of employee	23.0%	15.7%	19.5%	17.7%	18.1%
	4	Count	11	51	47	46	155
		Expected Count	19.5	54.9	43.1	37.5	155.0
		% within number of persons in the household (recoded)	7.1%	32.9%	30.3%	29.7%	100.0%
		% within income of employee	11.0%	18.1%	21.3%	24.0%	19.5%
	5	Count	18	33	35	21	107
		Expected Count	13.5	37.9	29.8	25.9	107.0
		% within number of persons in the household (recoded)	16.8%	30.8%	32.7%	19.6%	100.0%
		% within income of employee	18.0%	11.7%	15.8%	10.9%	13.5%
	6+	Count	20	62	47	34	163
		Expected Count	20.5	57.7	45.4	39.4	163.0
		% within number of persons in the household (recoded)	12.3%	38.0%	28.8%	20.9%	100.0%
		% within income of employee	20.0%	22.1%	21.3%	17.7%	20.5%
Total		Count	100	281	221	192	794
		Expected Count	100.0	281.0	221.0	192.0	794.0
		% within number of persons in the household (recoded)	12.6%	35.4%	27.8%	24.2%	100.0%
		% within income of employee	100.0%	100.0%	100.0%	100.0%	100.0%

Similarly, within the highest-income group (R3 501+), there is a similar pattern of distributions of all household sizes (1-6+ members): according to Table 3, the distribution percentages of this proportion are recorded as: 16.4%-29.1%-23.6% for small (1-3) households and 29.7%-19.6%-20.9% for large (4-6+) households. Consequently, these results also do not support the hypothesis (3) regarding the relationship between income and household size.

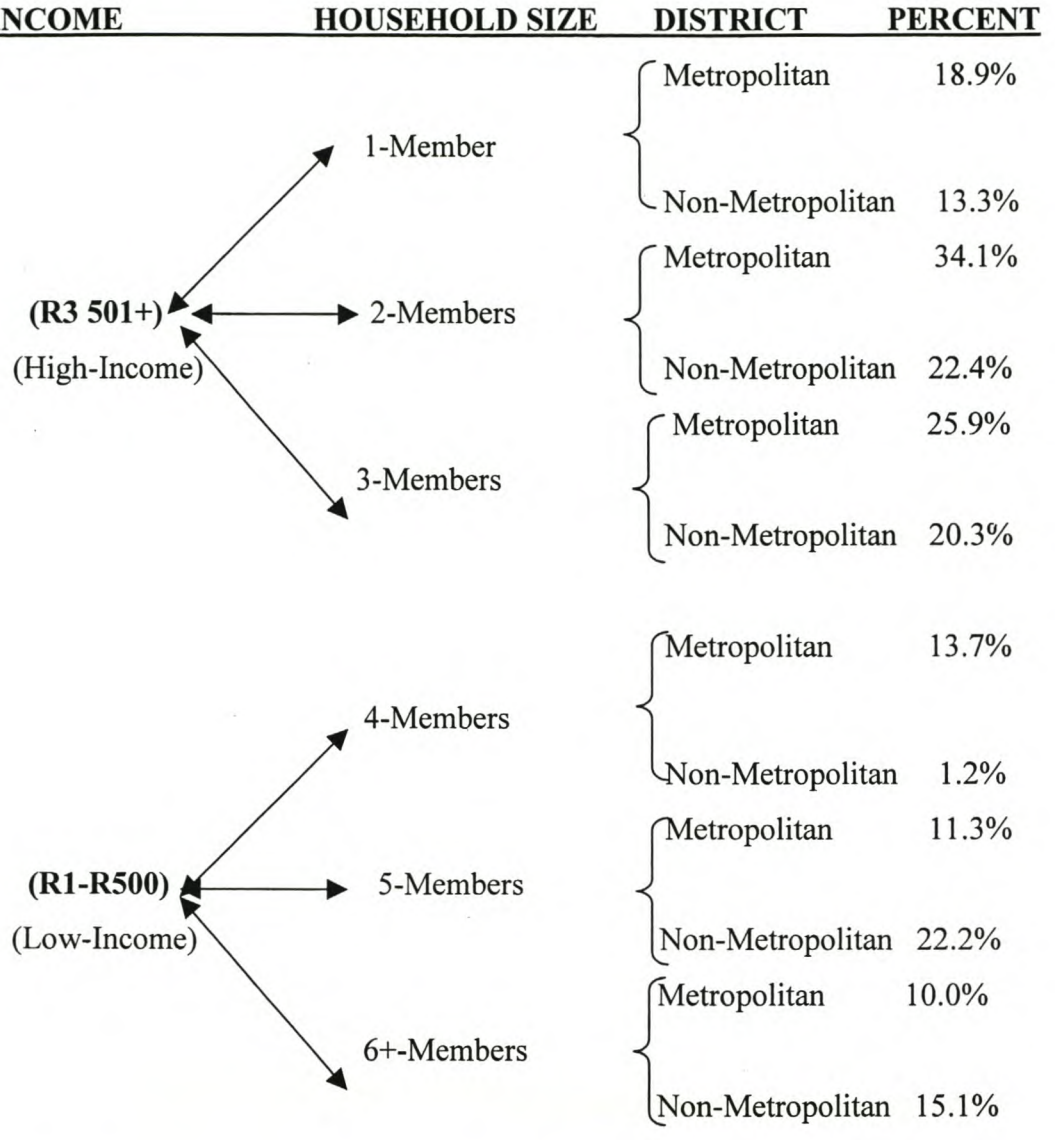
However, when the variable *district* is controlled for in this relationship, some interesting patterns appear that (unlike the bulk of the findings), appear to be partly in support of the hypothesis (3). This slight deviation is evident from the observation that the overall proportions of both high-income households (R3 501+) and small-size households (1-3 members) are comparatively higher in the metropolitan district than

in the non-metropolitan districts: i.e. in the former districts, the distribution percentages of these overall proportions are 18.9%, 34.1% and 25.9%, for 1, 2 and 3 member households respectively, while conversely in the latter districts, these percentage distributions are comparatively lower as they stand at 13.3%, 22.4% and 20.3%, for 1, 2 and 3 member households respectively. As hypothesised, there are high proportions of both high-income (R3 501+) and small (1-3) size households in the metropolitan than in the non-metropolitan districts.

Conversely, among the low-income households (R1-R500), the effect of controlling for *district* has some effect: there appears to be a higher proportion of both low-income and large (4-6+) household sizes in the non-metropolitan than in the metropolitan districts. The distributions percentages of this proportion are as high as 22.2% and 15.1% for 5 and 6+ member households respectively in the non-metropolitan districts (with an exception for 4 member households in that same category, as it shows an opposite trend whereby metropolitan instead of non-metropolitan households have a higher proportion (13.7%) over the latter (1.2%). The above percentages are much higher when compared with those of their counterparts in the metropolitan districts, which stand at 11,3% and 10.0%, for 5 and 6+ member households respectively (again with the exception of the 4-member households in the same category, which as stated, show an opposite trend).

The effect of the variable *district* on the relationship between *income* and *household size* is schematically represented below:

Fig. 5.7:



Although the results in Table 3 did not initially support Hypothesis (3), when one controls for *district* the results do however offer some support for the hypothesis, though only partially so. The effect of this (partial) support lies with the fact that as hypothesised, the proportion of high-income (R3 501+) and small households size (1-3 member) is higher in the metropolitan areas than it is in the non-metropolitan districts.

Conversely, this effect (of controlling for *district*) also shows a corresponding picture of a higher proportion of low-income (R1-500) and large size (4-6+ member) households in the non-metropolitan districts than in the metropolitan districts. In general, our results would suggest that *district*, as control variable, does have the

predicted effect on the relationship between *income* and *household size,* even though such a relationship is surprisingly not visible until the third variable is controlled for. The overall lack of support for the hypothesis 3 (about the relationship between *income* and *household size*) is further concluded by the statistical results: in statistical terms the effect of controlling for *district* shows the existence of both a weak and not statistically significant relationship between *income* and *districts* in the metropolitan districts: (Cramer'sV/r = 0.128); (Chi-square: 21.683; p>0.116). Similarly, in the case of the non-metropolitan districts, these relationships are also recorded as both weak (Cramer's V/r = 0.175) and not statistically significant (Chi-square: 10.935; p>0.757).

Another control variable in this hypothesised relationship between *income* and *household size* is *race*. According to Hypothesis (3), there should be high proportions of both high-income (R3501+) and small size (1-3 member) households and the probability of this situation should be higher within the White population group than within either Coloured or African population/racial groups. Similarly, high proportions of both low-income (R1-R500) and large size (3-6+member) households were expected to be higher amongst the poor population groups, which in this case refers to African and Coloured population groups.

However, in general, the results indicate that unlike *district*, the variable of *race* does not appear to have a predicted effect on the hypothesised relationship between *income* and *household size*. These results indicate instead that the proportion of both high-income (R3 501+) and small size households is in fact higher (62.9%) within the Coloured population group (and not within the White population group as expected) as compared to the Whites and African population groups in whose case the proportions are relatively lower at (51.3%) and (60.7%) respectively.[5]

This surprising outcome above could be attributed to the factors yet to be explored in subsequent studies.

[5] **N.B:** These percentages are arrived at by adding the various percentage scores of each population group i.e. African, Coloured and White in each of the 1; 2 and 3 member households categories as seen in Fig. 5.8 below.

These results of controlling for race in the hypothesised but unsupported relationship between *income* and *household size* can be schematically represented below as follows:

Fig.5.8:

INCOME	SIZE	RACE	PERCENT
(R3 501+) High-income & Small Size Households	1-Member	African	16.2%
		Asian/Coloured	12.5%
		White	6.6%
	2-Members	African	13.5%
		Asian/Coloured	34.0%
		White	37.7%
	3-Members	African	21.6%
		Asian/Coloured	25.4%
		White	16.4%
(R1-R500) Low-income & Large Size Households	4-Members	African	4.2%
		Asian/Coloured	15.4%
		White	23.1%
	5-Members	African	10.4%
		Asian/Coloured	33.3%
		White	0.00%
	6+-Members	African	25.0%
		Asian/Coloured	20.5%
		White	0.00%

(N=794)

It follows therefore that in general the controlling of the variable of *race* does not (like *district* partially does) improve the situation of an overall lack of support for the hypothesised relationship between *income* and *household size*. This view is further confirmed by the statistical outcomes: According to these statistics, these relationships are moderate (Cramer's V/r = 0.246) but statistically not significant (Chi-square: 15.086; p>0.445) for Africans, moderate (Cramer's V/r = 0.214), but

statistically not significant (Chi-Square: 17.246; p> 0.304) for Coloureds and moderately strong (Cramer's V/r = 0.282), but statistically not significant (Chi-square: 13.414; p>0.570) for Whites.

In short, the results above revealed that the hypothesised relationship between *income* and *household size* is in general, not supported by our findings. Furthermore, *race* did not show to have the expected effect on this relationship in accordance to our hypothesis

Unlike the variable *race*, controlling for the variable *district* in the relationship between the variables *income* and *household size* proved to support the hypotheses:

- that the proportion of highest-income (R3 501+) and small (1-4 member) household size is higher in the metropolitan districts than in the non-metropolitan districts,
- conversely, the proportion of lowest-income (R1-R500) and large (3-6+) size households is higher in the non-metropolitan districts than in the metropolitan districts.

5.2 Summary of findings

In summary, the data in Tables 1 and 2 shows that the findings support Hypotheses 1 and 2. However, the results in Table 3 show that the findings do not support Hypothesis 3. In brief these results indicate that:

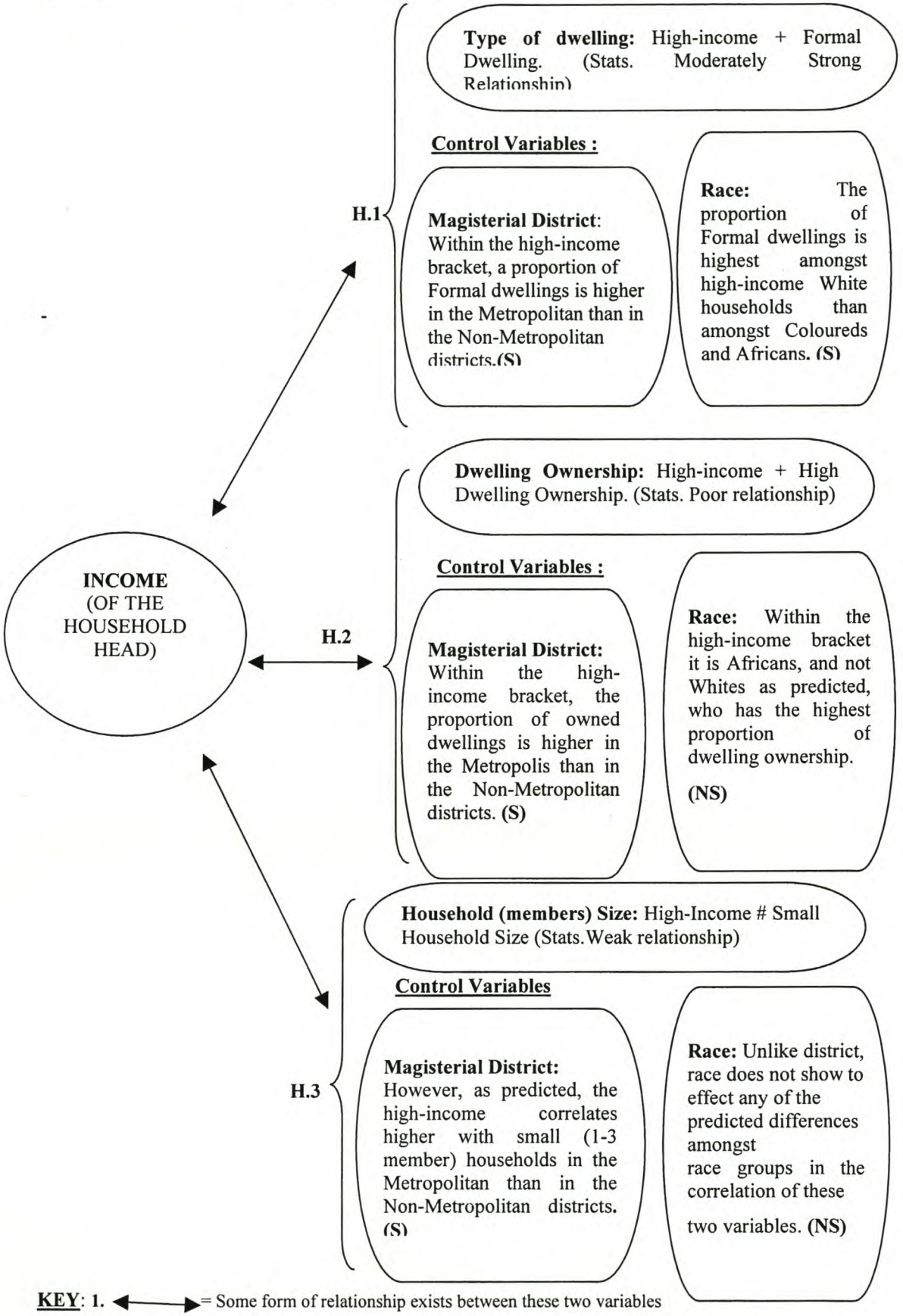
1. There is a relationship between *income* (economic variable) and type *of dwelling* (household variable). As expected, this relationship is higher in the metropolitan districts and among the White population group than it is in the non-metropolitan districts and in the African or Coloured population groups. However, the low-income households seem to deviate from this trend because, unexpectedly, the non-metropolitan households show a higher correlation with formal dwellings than those in metropolitan districts. This comes as a surprise and needs some kind of explanation.

2. A further relationship exists between *income* (economic variable) and *dwelling ownership* (household variable) in the predicted direction. This relationship is, as

expected, higher in the metropolitan than in the non-metropolitan districts, except in the case of low-income households, where non-metropolitan households have a relatively higher proportion of dwelling ownership. However, unexpectedly, the proportion of *dwelling ownership* is, in general, significantly higher amongst African households, and not in White households as I had anticipated. This proportion could can be explained by the fact that there are a significantly high percentage of informal dwellings amongst African households as compared with the other groups.

3. My findings showed that, (unlike expected) there is in general, no relationship between *income* (economic variable) and *household size* (household variable). There is also no evidence to support the predicted effect of the variables of *district* and *race* on the supposed relationship. The only exception though, is in the case of *district*: the effect of controlling for *district* shows that the proportion of association between high-income and small-size households is as expected, that is higher among those living in metropolitan districts than it is among those from the non-metropolitan households. But the overall situation is that the data does not support the hypothesis that there is clear the relationship between income levels and household size. Hypothesis 3 must therefore be rejected. However, my discussion in the next chapter may shed some light on the possible factors that could account for this outcome.

Figure 3 Schematic summary of the findings:



KEY: 1. ◄——► = Some form of relationship exists between these two variables

2. + = High correlation exists between the two variables; or # = Absence of correlations between. the 2 variables.

3. **(S)** = The predicted effect of the control variable is supported by findings; or **(NS)** = Predictions not supported

6. CHAPTER 6: CONCLUSIONS

6.1 The state of household living arrangements

This study leads me towards a general conclusion that peoples' life circumstances, in general, and their living conditions, in particular, are related to (and affected by) the broader macro-economic conditions that prevails in their respective countries. It is the researcher's contention that this conclusion reflects and satisfies the overall theoretical objective of this study: 'to assess the possibility of a relationship between macro-economic factors and the living conditions of households in terms of type of dwelling, dwelling ownership and household size'. This view is derived from the findings that supported two of the hypotheses about the relationship that income has with the type of dwelling and dwelling ownership, respectively.

In the context of the Western Cape, these results imply that the state of living arrangements of households are such that a relationship exists between the economic or material factors, (income) on the one hand and the households' characteristics (variables) (dwelling type, dwelling ownership and household size) on the other hand. In brief, this situation leads to further conclusions regarding patterns in this relationship:

6.1.1 Patterns in household accommodation:

- The overall patterns in the relationship between income categories and types of dwelling reveal that most of the poor (low-income) people live in informal dwellings, like shacks or other forms of low quality housing, while the overwhelming majority of more affluent (i.e. high-income) people live in better formal dwellings (houses). According to the statistics, this condition can be confidently applied to the entire population of the Western Cape (i.e. it is both a strong [Cramer's V/r = 0.286] and statistically significant [Chi-square 64.828; $p<0.000$] relationship).

The above finding is in line with common wisdom about households and lifestyles in general, which accepts that the living conditions of households are related in a significant way to the economic wellbeing of the heads of the households. In short,

high economic profiles (as measured by level of income) are associated with better living conditions.

The empirical evidence further suggests that controlling for the factor of geographical location does impact on this relationship, with the effect that among the poor, rural households fare better as they are more likely to have more formal types of accommodation than their urban counterparts. Various factors could account for this: these incorporate political and economic explanations.

From an economic point of view, the situation of housing facilities among the poor households of Cape metropolitan area in particular can mainly be attributed to migration into the metropolis, where authorities were unprepared for the sudden increase in the demand for basic services like housing. As Streek (2000) suggests, this process was, in turn, triggered by factors like high levels of poverty and a rapid increase in the number of the unemployed working-age population in the rural areas of both the Western Cape itself and the Eastern Cape regions.

The migration towards the Cape metropolis may have been further encouraged by macro-economic and political factors like the sudden loss of competitive edge by local fruit farms who now had to compete in the newly opened 'globalised' international markets. The consequential decline in profits and a parallel increase in interest rates and production costs have all had a negative impact on the fruit farms. Since these farms represent a vital economic activity in this region that has up until recently been the major source of employment among the rural poor, the economic blow to this sector led directly to unemployment and migration towards the cities.

Research conducted by Streek (2000:36) indicates that the effect of these developments has been large-scale job losses and retrenchment. The most immediate response of these workers has been, more often than not, to migrate towards the cities in search of a better life, only to come face to face with challenges like the scarcity of jobs and poor housing provisions when they get there.

Furthermore, the migration into the Cape metropolis by mostly African and some rural-based sections of the Coloured population group should be seen against the

background of recent political developments and changes. The most notable of these includes the recent scrapping of the Influx Control Act and 'Pass' law restrictions. These measures made the movement of African people into cities and large towns, particularly Cape Town, much easier than before. These political developments coincided with natural disasters like drought that plagued the Eastern Cape in late 1980s, as well as massive mine retrenchments which affected the Eastern Cape. The collective impact of these unfortunate developments was rising levels of unemployment, famine and widespread poverty, particularly amongst the African and Coloured population groups.

These unfortunate socio-economic developments led to undesirable conditions of living that made the Western Cape metropolis become one of the preferred migration destinations for those in search for jobs and better life. However, the Cape metropolitan authorities, like most of the others in South Africa, were caught unprepared and did not have the necessary infrastructure to accommodate this influx of migrants. Consequently, a wave of informal settlements mushroomed around the metropolis, as they have elsewhere in South Africa. This chain of developments ultimately explains the fate of the urban poor and particularly why they are the worst off in terms of lack of shelter and housing. However, the possibility should not be ruled out that these patterns (type of dwelling) could have been different were it not for this factor of migration.

With regard to the factor of *race*, the evidence confirms that African households are the worst off in terms of the quality of accommodation compared with other population groups. This group has the highest proportion of people who live in informal dwellings and surprisingly this situation also applies to those that are within the high-income bracket (R3 501+). A similar finding applies to other household attributes like ownership, as will be seen in the next section.

6.1.2 Patterns in household attributes (i.e. ownership status)

- There is (as hypothesised) a relationship between *income* and *dwelling ownership.* However, this relationship is neither strong nor statistically significant and therefore its applicability to the entire population of the

Western Cape should be treated with some degree of caution. (Cramers' V/r = 0.094 and Chi-square =7.001; p>0.072).

What is even more unexpected about this finding is that the results reveal that when the variable *district* is controlled for, low-income (R1-R500) households in the non-metropolitan areas are more likely to own their dwellings than their metropolitan counterparts. Considering that the opposite picture was expected from my hypothesis (H2), this finding comes as a surprise. However, a possible explanation could be offered by taking various factors into account. The first factor is the relatively high incidence of rented accommodation (e.g. local municipality flats) in the poorer metropolitan suburbs.

The second, and perhaps most plausible, reason for this unexpected outcome is the fact that quite a proportion of the owned dwellings are in fact very informal types. This means that the actual proportion of dwelling ownership for this group would be lower if the informal dwelling types were excluded. It is probably this very factor that generated the finding that African population group were leading in terms of dwelling ownership, where the reverse trend was expected according to the hypotheses.

This situation therefore should engender caution when interpreting the results as it implies that this race group (i.e. African households) may not necessarily be better off than others in respect of dwelling ownership.

The following section focuses on patterns in the other aspects of living arrangements, i.e. household size.

6.1.3 Patterns Household Size/Composition

- Quite surprisingly, there is no clear pattern evident in the expected relationship between *income* and *household membership size*.

The above finding about *household size* however, leads to almost no conclusion other than that it goes against the grain of common thinking about households 'that better income would lead to western lifestyles which also imply nuclearisation or smaller

sizing of households'. Various explanations can be suggested for this unexpected outcome:

Firstly, according to the literature, Kelley (1980: 1084) cautioned against the fact that it is not possible to provide a strong a priori judgement on the relationship between income and family size particularly in poor countries where the socio-economic circumstances of households are more complex. For example, within the Black households, better-paid household heads are (unlike their White counterparts) often faced with the challenge of accommodating their unemployed children or relatives. This is on account of rising unemployment levels resulting from particularly high job losses and poor job creation efforts in this population group.

Secondly, lower levels of education could be a factor that should be taken into account. While high incomes may encourage smaller nuclear size households, the relationship between these two factors may not always be direct and other intermediate variables, like education for example, may play a role in this. It may be possible that high incomes lead to a better prospect for households where members are better able to learn about the needs and convenience of smaller size families than those who have lower levels or no education. Therefore high income and good material conditions do not necessarily have a direct influence on household size or composition. This could account for the expected correlation patterns between income and household size, which necessitated the rejection of Hypothesis 3.

Furthermore, these unanticipated results may also be due to the factor of increased migration from rural to urban/metropolitan areas, as this would contribute towards accommodation or housing problems and which may cause fluctuations in the household membership size from time to time. A typical example of this would be a situation where two or more families share one household unit (on account of. lack of housing), rent affordability or a combination of both.

Such scenarios are common, particularly within the context of poor Third World living conditions and the hard economic, material circumstances to which most African and Coloured households are subjected. Here people devise life strategies that will ensure their survival, not only as individuals, but also collectively as households. These strategies may include the incorporation of relatives or friends into

the household with the idea of their contributing financially to the welfare of the unit through subletting. The subletting system amongst the Indian people in Phoenix near Durban (Singh 1996) is a case in point and reflects efforts made by economically dependent individuals and households to ensure their survival.

The lack of a clear relationship between *income* and *household size* supports the claim of researchers like Spiegel *et al.* (1996), who, contrary to popular belief, maintain that the concept of a predictable, stable household size and composition, simply cannot be applied to sectors of the South African society that are characterised by conditions of poverty. As this is very much the case with the Black and Coloured groups within the sample used for this study, in retrospect it seems that I should not have expected the results to show otherwise.

This view is particularly true not only of the South African situation but has relevance internationally, especially in the light of the research findings of Ahlburg *et a (l.* 1992) that even the current American situation shows that their household size and composition have become less predictable due to changes in socio-economic structure of families.

However, even though controlling for the variable *race* did not make any change in the lack of relationship between *income* and *household size*, controlling for *district* partially did. The effect here was that low-income correlated more strongly with large households (4-6+member) in the non-metropolitan districts than in the metropolitan districts. Conversely, high-income correlated more strongly with smaller households in the metropolitan districts than in the non-metropolitan districts.

This unexpected deviation highlights the need for further investigation in this area. Other scholars (for example, Ahlburg *et. al.*1992) have already suggested that households around the globe where nuclear households were previously the norm are currently undergoing drastic changes imposed by economic factors. As a result, households even in so-called First World countries, particularly in the United States and Europe, are now exhibiting continual flux and unusual composition.

The overall conclusion that derives from our findings is that patterns in the living arrangements of households, like the quality of household accommodation, household attributes and household composition, are more often than not still a true reflection of the broader socio-economic climate in which they exist. This view reiterates previous argument by Sanjek (1982:99) that "households are shaped by their political and economic context" (cited in Benson 1990:10). This would therefore imply that such patterns are influenced to a great extent by the status of such households in the national wealth distribution of the given country.

In South Africa, and particularly the Western Cape, the above statement further implies that the respective district (metropolitan or non-metropolitan) and race group (African, Coloured or White) of the household would, in addition to the role of income, have crucial influence on the material and economic prospects of the household in question. In other words, a household's economic profile can, to a large extent, be predicted by these factors.

The questions around the strength of this overall relationship discussed in this study should therefore serve as prompting to further investigations into the nature and direction/causality of this observed relationship in follow-up studies.

6.2 The Reflections on Secondary Data Analysis

The experience of this study has shown that large datasets designed with secondary analysis in mind may be a convenient method of conducting a research study. These datasets contain data from which an analyst is able to select the best variables for designing a study. This can be accomplished both speedily and economically.

The designing of this study entailed careful selection from among a wealth of available variables, the ones that best defined key concepts of the topic, for example that of the material basis (e.g. household income, type of means of survival and type of dwelling ownership). Through the recoding facility offered by SPSS, it was possible for me to recode these variables as the best indicators of the key concepts of interest. The new variables included, *inter alia:*

- The level of magisterial district within (metropolis and outside metropolis areas), recoded from the list of towns and cities in the province in accordance with their level of industrial development.

- Type of dwelling (formal or informal), recoded by regrouping various types of dwellings as formal (if made of proper housing material like bricks and cement) and informal (if made of poor material like mud, wood or corrugated iron, etc. like backyard rooms or shacks).

However, the use of secondary data also posed limitations, particularly at the methodological level. This means that regardless of the achievements of recoding mentioned above, the topic may not have been sufficiently covered, as would have been the case in a primary study (one of the inherent limitations of secondary data). This view is supported by the fact that the recoding process, for one, offered challenges similar to the 'over-stretching' problem in the sense that the analyst had to assume the true meaning of the concepts from the best combination of variables available, particularly during the recoding stage. For example, I had to assume that the combinations of many differing responses would, on the basis of their assumed conceptual commonality, constitute certain response categories, as was the case when recoding the various types of dwellings into either formal or informal household living units.

According to Hyman (1972:31), problems such as the above occur when the analyst, due to the lack of more appropriate indicators, collects the best from among the data or reshapes available questions to assume a certain meaning. Such errors can undermine the validity of the study, and this certainly applies to this particular study. I would therefore suggest that a follow-up study (e.g. case studies) be conducted within the framework of a qualitative methodology. However, I hope that my study experience is a challenge to other analysts to make better use of secondary datasets.

The other challenges in this study relate to statistical interpretation. According to Norusis (1995:370) problems like these arise when an analyst is confronted with the difficulty of interpreting statistics that are offered by advanced (social) statistical programs like SPSS. Under such circumstances, it becomes difficult (as I discovered

in my study) to reach meaningful conclusions about the nature of apparent relationships between variables in the tables.

6.3 Recommendations

The findings in this study (for example, the low levels of formal house/dwelling ownership, new patterns of flexible living arrangements and changes in the size of households, particularly in the Cape metropolis districts) may influence or be influenced by other phenomena related to household arrangements (for example, current patterns in migration).

Since the topic of migration patterns into the Cape metropolis is currently being researched by local government policy-makers and by researchers in academic and professional circles, I would suggest that a follow-up study be conducted to explore the nature of any possible relationships this may have to households (for example, how specific migration patterns relate to various aspects of household living arrangements and *vice versa).*

Perhaps such an undertaking is even more relevant since the initiation (in 1999) of a debate, by the Welfare Department, on the need for a universal Basic Income Grant for the poorest of households. Apparently, the objective behind this proposed grant is a measure of poverty relief for households who are worst affected by the poverty that resulted from macro-economic failures to create jobs but also to halt the high rate of job losses as a direct result of economic restructuring related to globalisation. As Tomlinson (2000:47) explains, the effect of both HIV/Aids and globalisation has been negative on household incomes, thus significantly reduces the ability of households to provide for themselves. A follow-up study that could reflect qualitatively on the state of living arrangements would perhaps inform and contribute towards developments around the proposed policies in a constructive way.

Future studies on this topic could explore the exact directions (causality) of the relationships discussed in this study as qualitative data could perhaps help to explain some of the unusual findings, like the one relating to apparent lack of relationship in the expected direction between income and household (membership) size. Such

efforts could possibly include studies that aim to further investigate the findings of this study in respect of the following:

- Reasons to account for the finding that amongst high-income (R3 501+) households, Africans have the highest proportion (45.9%) of households living in informal dwellings as compared with their Coloured (2.1%) and White (0%) counterparts. Future studies could focus specifically on investigating the reasons behind this finding.
- The reasons behind why low-income earning (R1-R500) households in the non-metropolitan (54.3%) areas are better off than their metropolitan (45.7%) counterparts in terms of accommodation (proportion of households living in formal as opposed to informal types of dwelling).
- The implications of the finding that there were no clearly discernable patterns showing the relationship between income and household size. Such an investigation would also help to explain why when controlling for *district* the data provided partial support for the hypothesis, while controlling for *race* did not have a similar effect.

I hope that future follow-up studies as recommended here will produce findings that could inform and update the current literature on both living arrangements of households and the methodology of secondary data analysis in order to meet the main objective that informed this study.

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STUDY DESCRIPTION ANNEXURE: A*

SADA 0079 October Household Survey 1995

PRINCIPAL INVESTIGATOR: Central Statistical Service

DEPOSITOR: Central Statistical Service

ABSTRACT: The October Household Survey (OHS) of 1995 is the second official survey undertaken by the Central Statistical Service (CSS) with the specific aim to make information available for the Reconstruction and Development Programme (RDP). The OHS is one of the so-called presidential projects and provides valuable information regarding the formulation of policy and the planning and implementation of the RDP. The OHS is an annual sample survey that was undertaken for the first time in 1993. The original purpose of the OHS was to fill the gap that resulted from the suspension of the Current Population Survey (CPS) amongst Blacks in 1990 and amongst Coloureds and Indians in 1991, as well as the suspension of the related survey on the informal sector. Since 1994 the main purpose of the OHS has been to collect RDP information with regard to households and individuals according to the nine provinces. The questions included are on: particulars of and services in the dwelling; perceived quality of life; socio-biographic information; RDP-related information on unemployment; the informal and formal sectors; as well as statistics on births and deaths.

GEOGRAPHIC LOCATION: South Africa

IMPORTANT VARIABLES: Employment, unemployment, informal sector, internal migration, services available by type of dwelling, access to health and social services, safety and well-being of household, households by average household size and type of dwelling, level of education, quality of life, health statistics, vital statistics.

DEMOGRAPHIC VARIABLES: Age, gender, level of education, marital status, migration, use of health services, economic activity, unemployment, employment and self-employment.

UNIVERSE: Households in the nine provinces of South Africa as it currently exists.

METHOD OF DATA COLLECTION: Survey Questionnaire

TYPE OF DATA: Structured survey

UNITS OF OBSERVATION: Households Analysis*

DATE OF DATA COLLECTION: September - November 1995

ANNEXURE 'B'

Table 1: South Africa by population group and gender

	African/ Black			Coloured			Indian/ Asian			White			Unspecified/ Other			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
South Africa	14,916,712	16,210,919	31,127,631	1,744,020	1,855,626	3,600,446	512,231	533,365	1,045,596	2,162,609	2,271,998	4,434,697	184,328	190,878	375,204	19,520,887	21,062,685	40,583,573
Western Cape	419,698	406,994	826,691	1,040,409	1,105,700	2,146,109	20,350	20,025	40,376	394,850	426,701	821,551	60,187	61,961	122,148	1,935,494	2,021,381	3,956,875
Eastern Cape	2,493,702	2,954,793	5,448,495	226,745	241,787	468,532	9,603	9,752	19,356	160,649	169,644	330,294	17,358	18,492	35,849	2,908,056	3,394,469	6,302,525
Northern Cape	138,757	139,876	278,633	212,000	223,368	435,368	1,117	1,151	2,268	54,781	57,063	111,844	6,026	6,181	12,208	412,681	427,639	840,321
Free State	1,098,447	1,125,493	2,223,940	39,254	39,784	79,038	1,601	1,204	2,805	153,182	163,277	316,459	5,864	5,398	11,262	1,298,348	1,335,156	2,633,504
KwaZulu-Natal	3,204,199	3,676,453	6,880,652	56,177	61,774	117,951	384,193	406,619	790,813	273,079	285,103	558,182	32,879	36,544	69,423	3,950,527	4,466,493	8,417,021
North West	1,503,944	1,554,742	3,058,686	22,744	23,908	46,652	5,229	4,868	10,097	109,393	113,362	222,755	8,526	8,109	16,635	1,649,835	1,704,990	3,354,825
Gauteng	2,676,023	2,471,421	5,147,444	133,847	144,845	278,692	80,599	80,690	161,289	831,006	871,338	1,702,343	29,370	29,285	58,654	3,750,845	3,597,578	7,348,423
Mpumalanga	1,210,499	1,287,335	2,497,834	9,952	10,331	20,283	6,629	6,454	13,083	126,823	126,569	253,392	8,124	7,996	16,120	1,362,028	1,438,683	2,800,711
Northern Province	2,171,442	2,593,813	4,765,255	3,792	4,029	7,821	2,910	2,600	5,510	58,937	58,941	117,878	15,992	16,913	32,904	2,253,072	2,676,296	4,929,368

20.9% 55.2% 20.8% 3.1% = 100%

ANNEXURE C